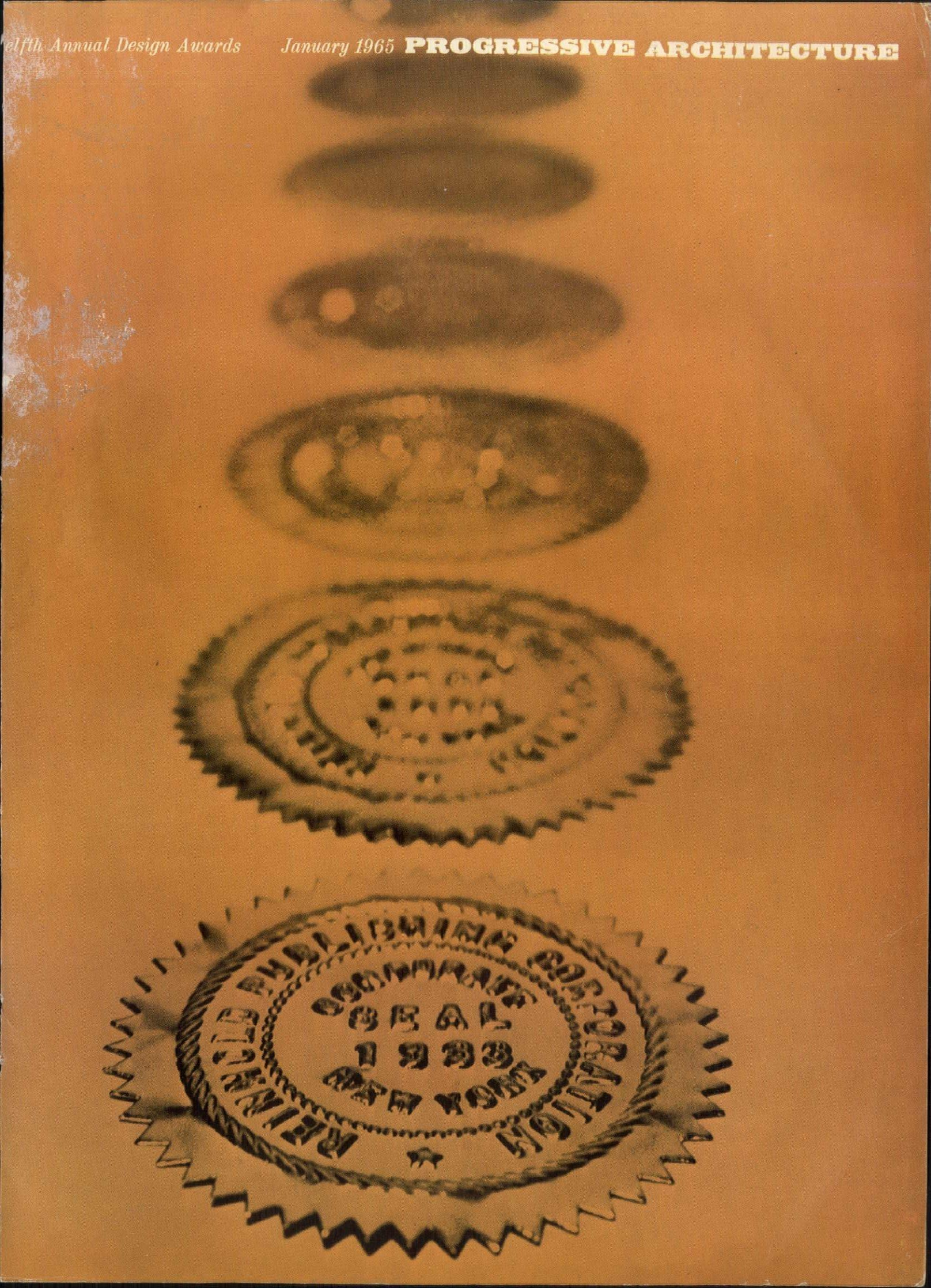
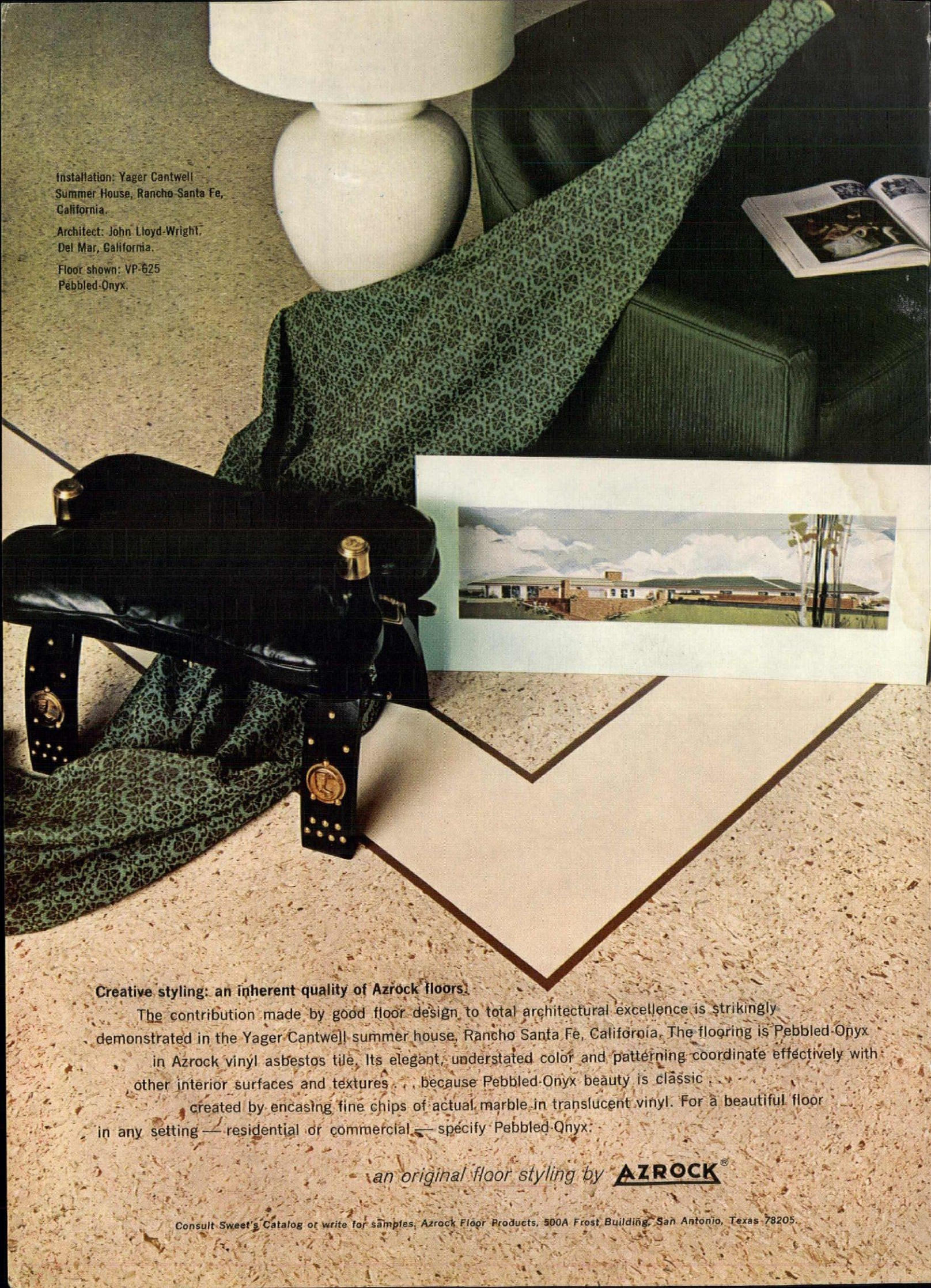

SEAL
1933



Installation: Yager Cantwell Summer House, Rancho Santa Fe, California.

Architect: John Lloyd-Wright, Del Mar, California.

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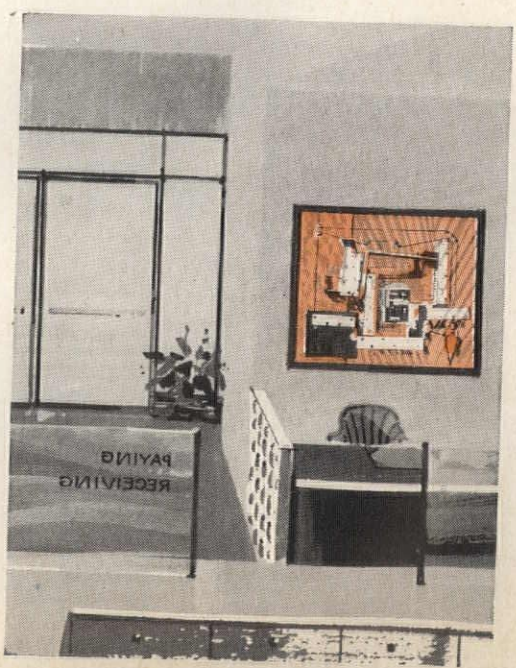
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PROGRESSIVE ARCHITECTURE, JANUARY 1965

COVER
The Reinhold Publishing Company Seal, seen in diminishing perspective, marks the announcement of winners in the Twelfth Annual P/A Design Awards Program. (Photo by G. Monaz.)

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123 **TITLE PAGE**
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124 **FRONTISPIECE**
As evidence of how our jurors combine the hard work of premiating designs with relief-yielding flights of fancy, we present this graphic assortment of juror notations and doodles, the latter conceivably inspired by some of the losing entries.

125 **EDITORIAL**
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VIEWS

More on the Allegheny Square Competition

Dear Editor: Re your article in the NOVEMBER 1964 P/A on the Allegheny Square Competition, please add our name to the growing list of dissidents on "architectural competitions."

It is inconceivable to me that a jury can select, from 305 entrants, one scheme that is so superior that the remainder should be disregarded as unacceptable.

Our entry concerned itself primarily with a design scheme with the anticipation that Phase II would provide the opportunity for a more detailed study, including landscaping, furniture, and the like, which would result from a model and other three-dimensional studies.

I was very much impressed by the plans and photographs contained in your November issue and saw several that deserved more consideration, both from an aesthetic and utilitarian standpoint. The Allegheny Square Competition has done a disservice both to the meaning of architectural competitions and to the City of Pittsburgh.

CHARLES C. SHEPHERD
Philadelphia, Pa.

Dear Editor: Thank you for including our letter and photos in your article on competitions in the November issue. The article has been received with "amens" by almost every architect I know who has submitted an entry in the last few years.

Not having had enough of competitions as yet, we've entered the San Francisco Civic Center Plan Competition!

NESBITT A. GARMENDIA
New York, N.Y.

Dear Editor: I was interested in your article in the November issue concerning architectural competitions and in particular concerning the Allegheny Square Competition. I happen to be in an unique position to make comments on that competition, comments which I would apply to competitions in general, since I was a competitor, but was unable to submit my design due to a last-minute illness. Therefore, my comments cannot be taken in this instance as "sour grapes." Also, my solution was very similar to the winner, so my comments should not be taken as a criticism of the winning design.

The requirements of most competitions are very strict for the competitor. They require the expenditure of much time and money, many times needlessly, in the case of a two-stage competition. But the judges are not obligated to perform to comparable standards of behavior. Nor do they seem to feel any obligation toward the competitor, who enters with the understanding that he has a reasonable chance of gaining something in the way of prestige or financial reward for his efforts. For judges to behave as have those in this instance is a disgrace to the profession. Whatever may have been their psychological motivations, it certainly gives the appearance that they are attempting to glorify themselves at the expense of the competitor, by the implication that none of the submissions are up to their personal standards.

For a handful of judges to expect me or any reasonable person to believe that the average of their personal standards of excellence or sensitivity is greater than that of 304 out of 305 qualified individuals or firms is just too much.

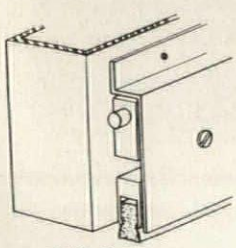
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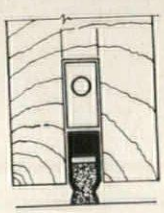
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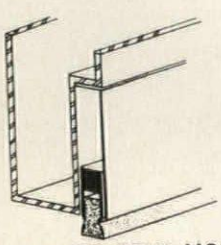
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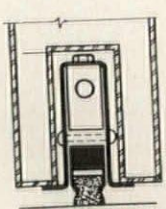

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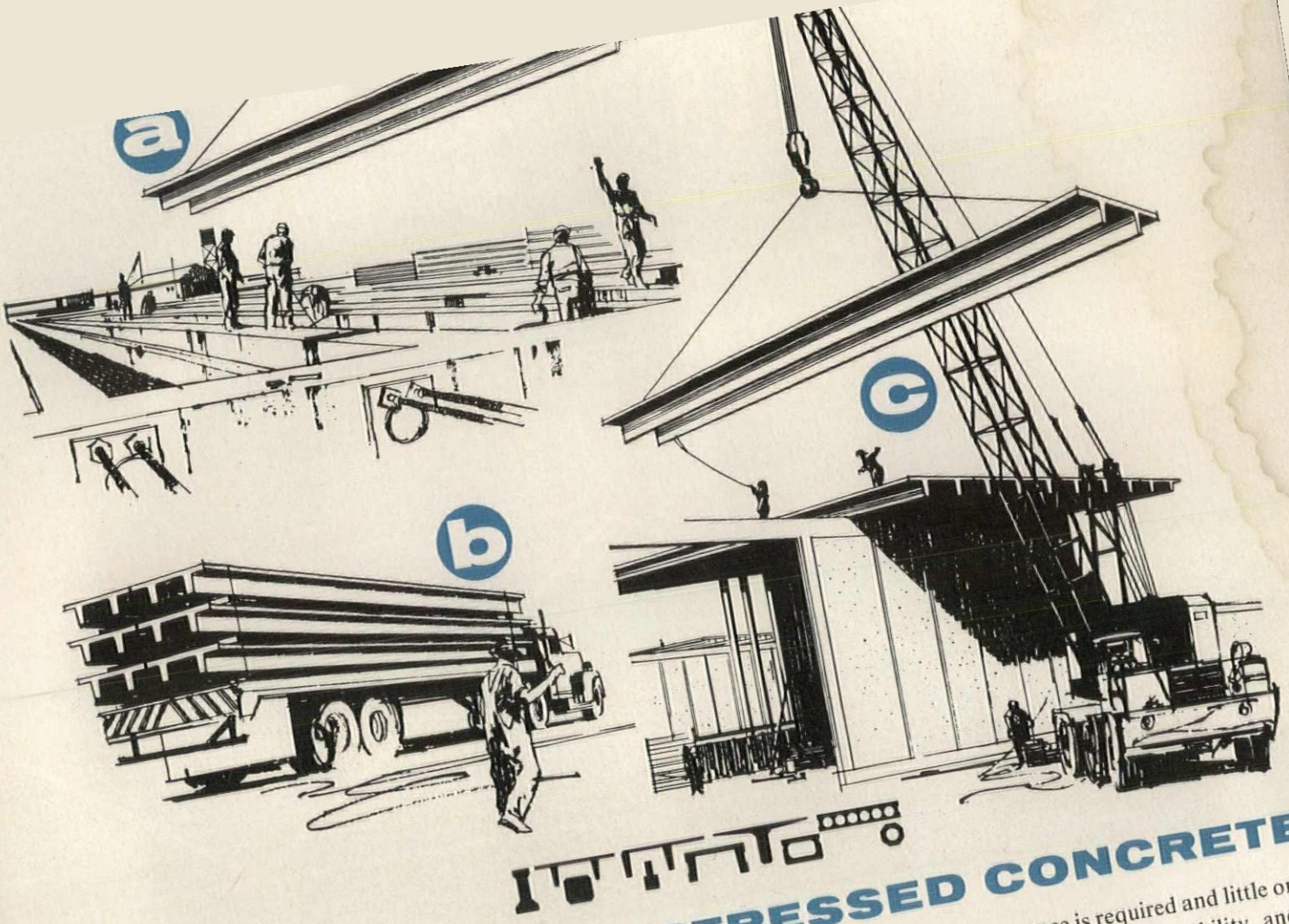
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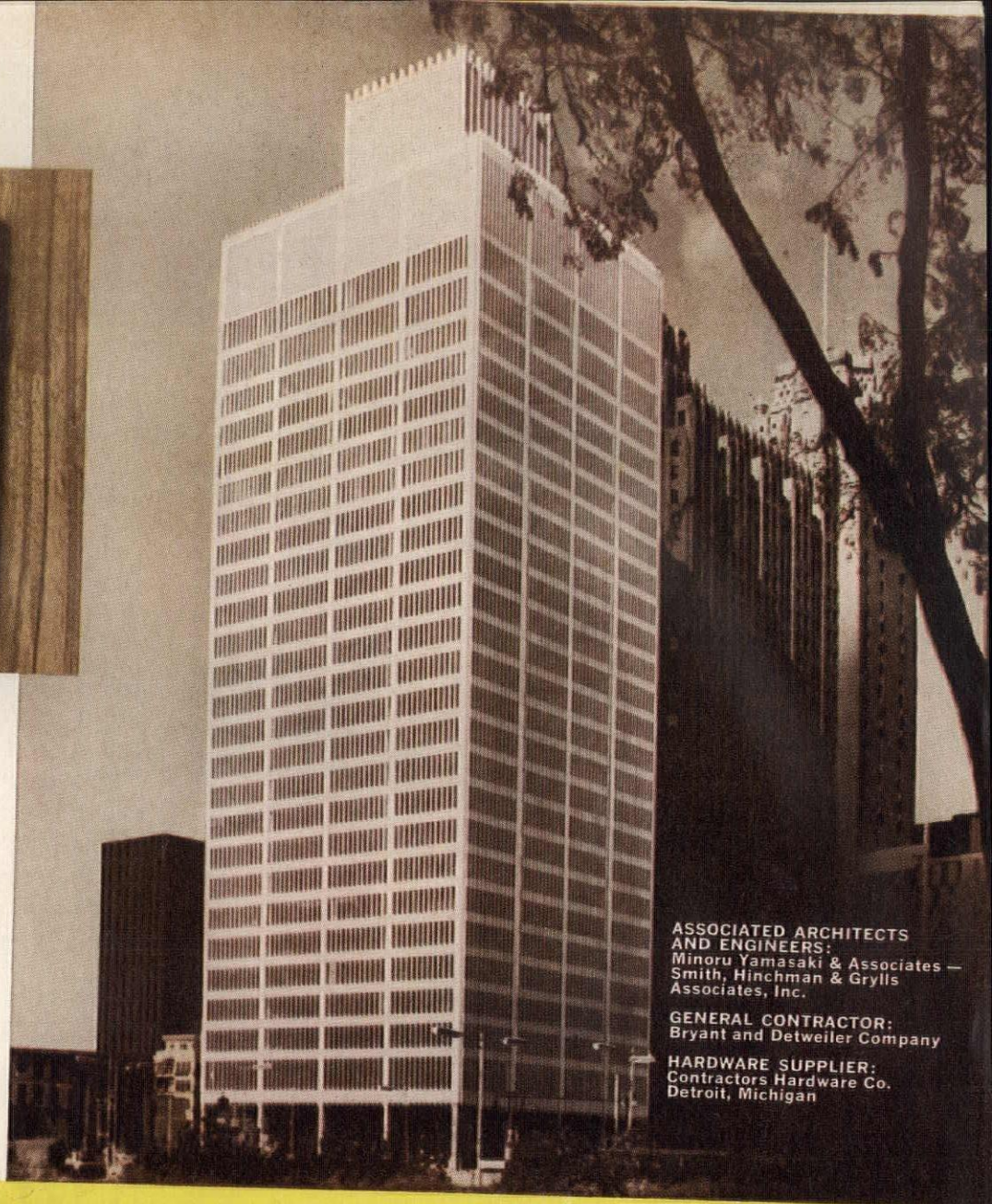
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Continued from page 4

It seems to me that there is a responsibility on the part of the persons or organizations initiating a competition to live up to their advertisements and to award prizes as promised, regardless of their opinion or their judges' opinion of the quality of the work submitted. There are several ways in which this could be accomplished. First of all, any person or organization conducting a competition under professional standards of the AIA should be required to post a bond in the full amount of the prizes advertised. Secondly, every judge should be required to make selections to the best of his ability. Third, should any judge or jury display the same temperamental and self-righteous attitude as the Allegheny Square judges, they should be dismissed and a new jury selected.

To sum up my feelings, I think we are long past the time when a competition should be merely a vehicle for the judges to use as a demonstration of their own superior intellect and sensitivity.

JAMES T. DARROUGH
Columbia, Mo.

Dear Editor: Jim Burns' article entitled "Architectural Competitions: Have They Lost Meaning?" in the November issue offered interesting comment on a very important subject.

Perhaps the problems inherent in competitions, which Mr. Burns has highlighted, give us a clue to the increasing popularity of awards programs conducted by various professional groups. Although not the same thing as competitions, awards programs serve two extremely important functions: They provide an opportunity to give recognition to deserving creative members of the architectural profession, and they also offer an excellent means of dramatizing new developments in the design field.

The Prestressed Concrete Institute has tried hard to insure that its annual Awards Program be as instructive to architects as it is to producing members of our industry. Judging by the annual response from architects and the willingness of nationally known men to serve on our jury each year, the program has been accepted by the profession.

It is our hope, incidentally, that we can draw another parallel with competitions in years to come. Mr. Burns points out that many eminent men such as the senior and junior Saarinens first came to public attention in competitions. The winners of the PCI program for the last two years (as probably happens more often than not in awards programs) were not well known outside of their own region. But qualified men in the profession have predicted bright futures for our two winners, Maurice Robillard of Montreal and Perry Neuschatz of Los Angeles.

R. G. LYMAN
Executive Director
Prestressed Concrete Institute
Chicago, Ill.

Freedom of the Press

Dear Editor: No doubt you have heard this before, but I really don't ordinarily write fan letters to Editors.

But I was so favorably impressed with your Editorial on censorship (NOVEMBER 1964 P/A) that I can't help writing this merely to say Bravo!

Many of us have tried to say the same thing many times, but I think you have said it better than most.

S. R. BERNSTEIN
Publisher, "Advertising Age"
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Continued on page 12

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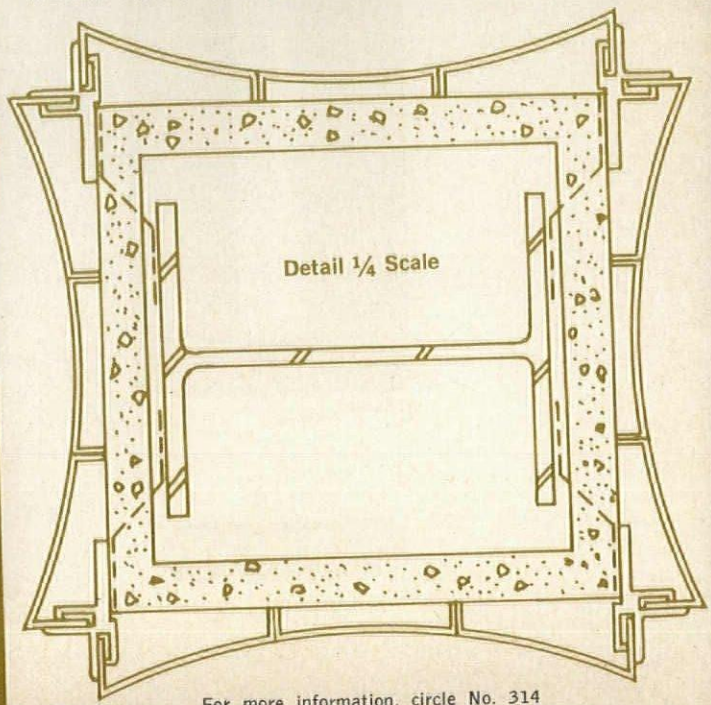
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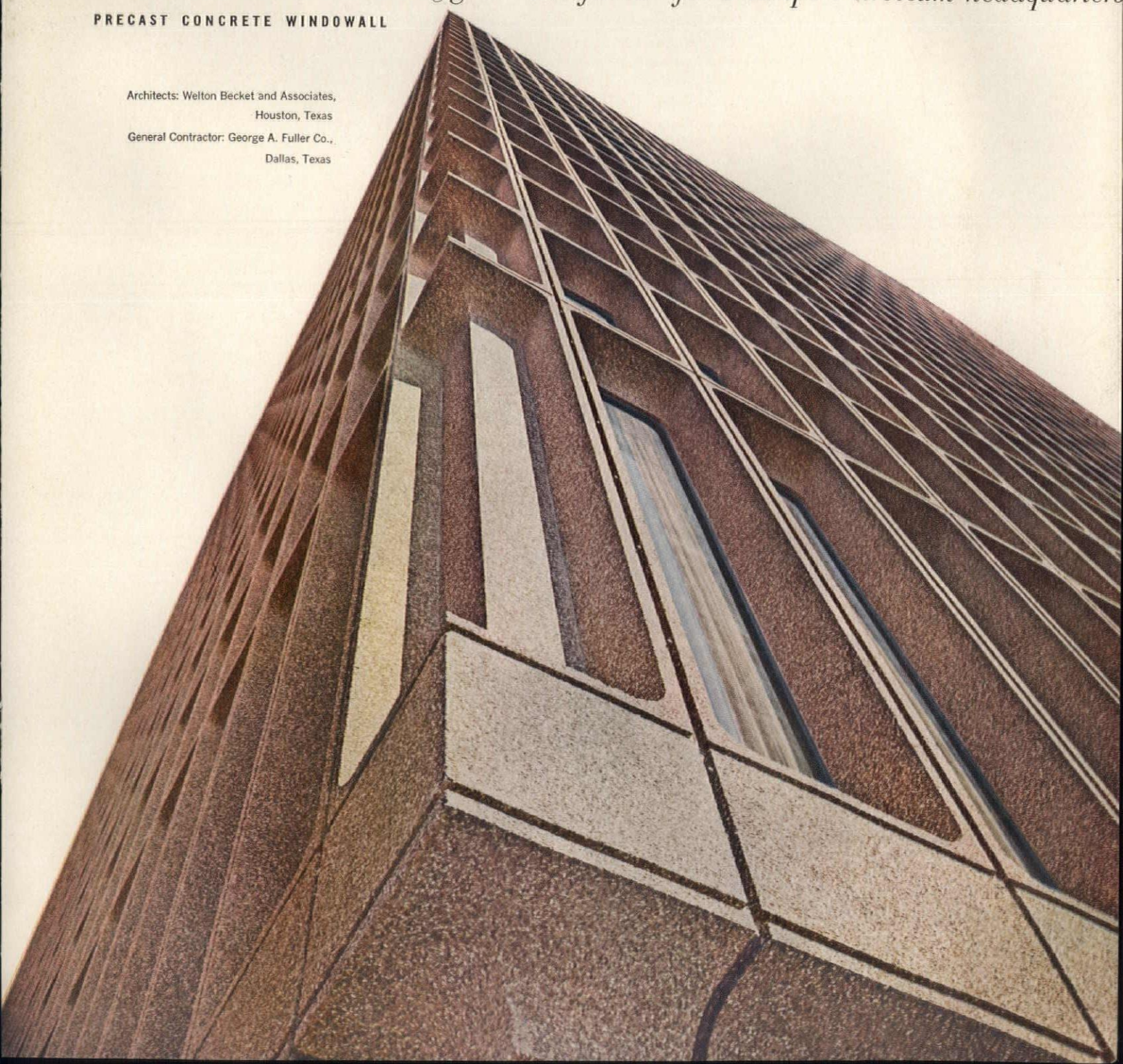
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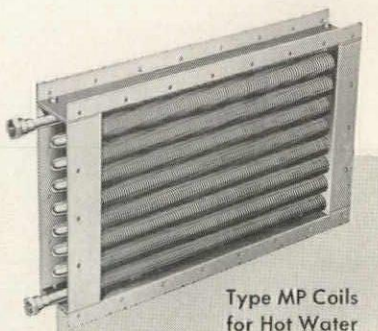
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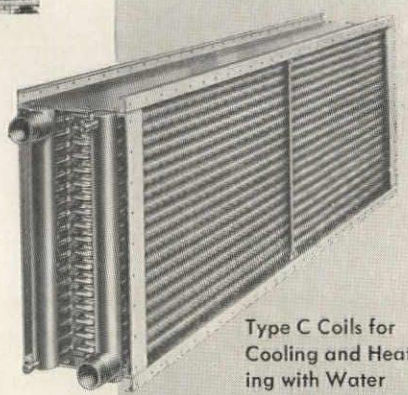
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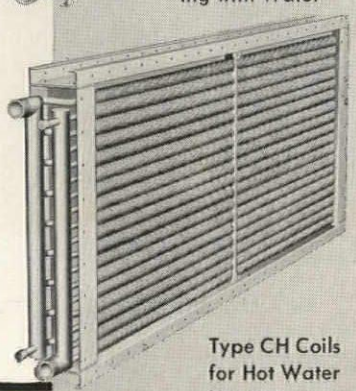




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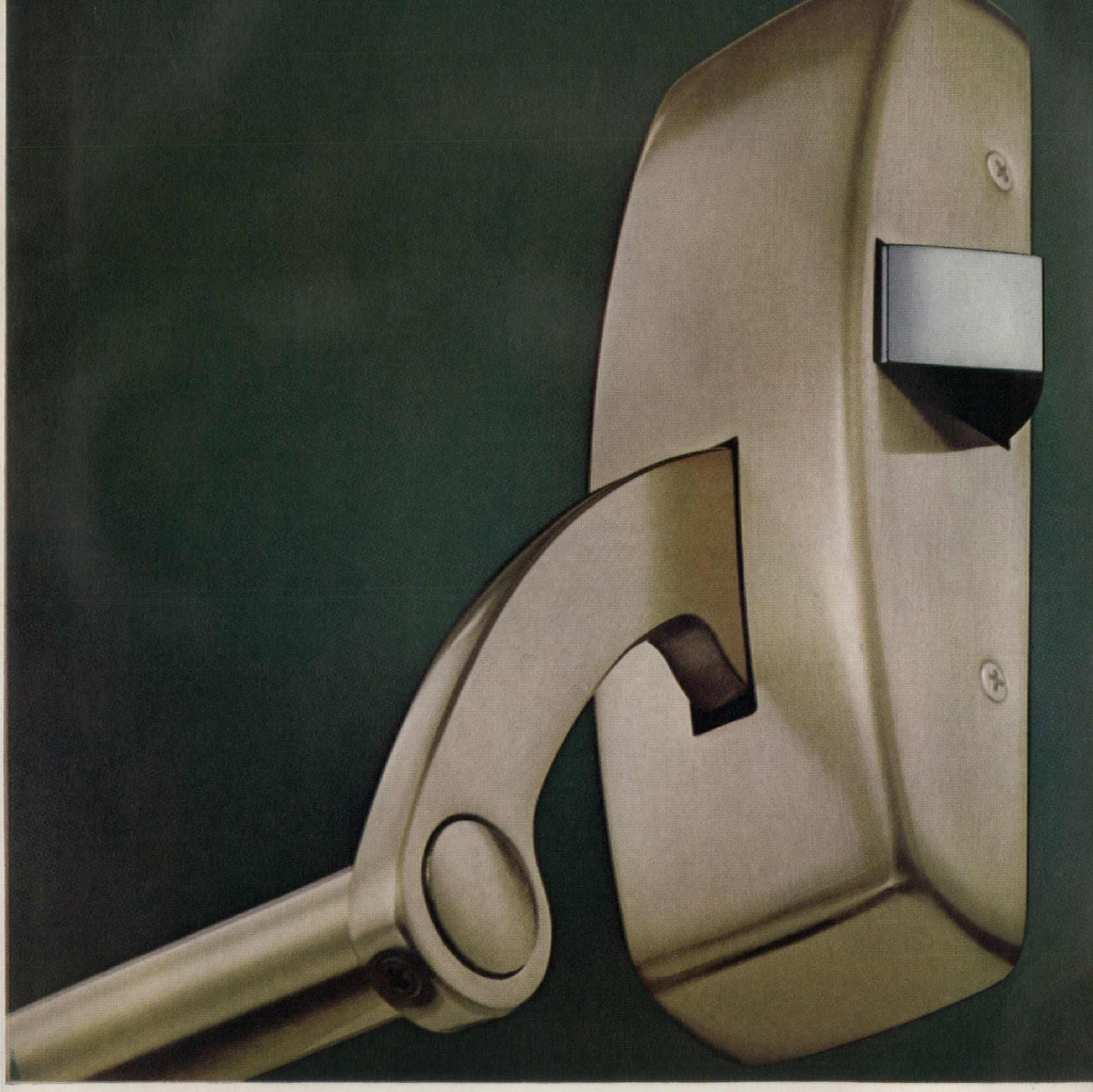
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Aerofin is sold only by manufacturers of fan system apparatus. List on request.

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RUBBAIR FLEXIBLE DOORS OUTLAST ORDINARY DOORS BY AS MUCH AS 10 TO 1

Rubbair Doors are designed to take the punishment in an industrial operation from fast-moving motorized vehicles. They are constructed to absorb the shock which normally would splinter door frames, shear screws or fracture hinges.



Rugged V-Cam hinges reduce resistance of door to vehicles

What's more, Rubbair Doors have been proved in use for the past 10 years in thousands of major industrial plants, in U.S. Post Office buildings, and other governmental installations.

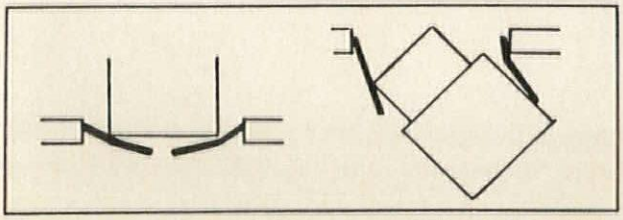
Construction features are as follows:

1. Rubbair Doors are double acting, self closing type approximately $1\frac{13}{16}$" thick. They are of a unit construction using rubber extrusions, or I-beams, uniformly spaced and vulcanized to a high strength (tensile strength is 3,000 lbs. per square inch) rubber casing. The space between the I-beams is filled with a high strength, shock absorbing neoprene-coated curled hair padding. Doors have good dimensional stability.

2. Rubbair Doors are supplied completely assembled and ready to mount. Simple, rugged V-cam hinges also supplied, provide smooth, easy opening on contact, and rapid, gravity-actuated recovery.

3. Safety-cushion nose, and shatterproof windows all contribute to extra-long service life and extra safety for personnel and equipment. Scuff resistant wear panels also available if required.

In addition to these features, Rubbair Doors also save the user substantial sums in maintenance . . . no painting . . . no scratching . . . no denting. Just hang them and forget them.



Door flexes under impact, absorbs shock: keeps maintenance to a minimum

Other Rubbair Door Advantages — Durability is only one of many Rubbair Door advantages. Here are others:

1. Flexible construction provides extra safety for personnel and equipment.

2. Positive air seal provides effective barrier against dust, moisture, odors, noise, etc.

3. Quiet operation. Ideal for hospitals, libraries, etc.

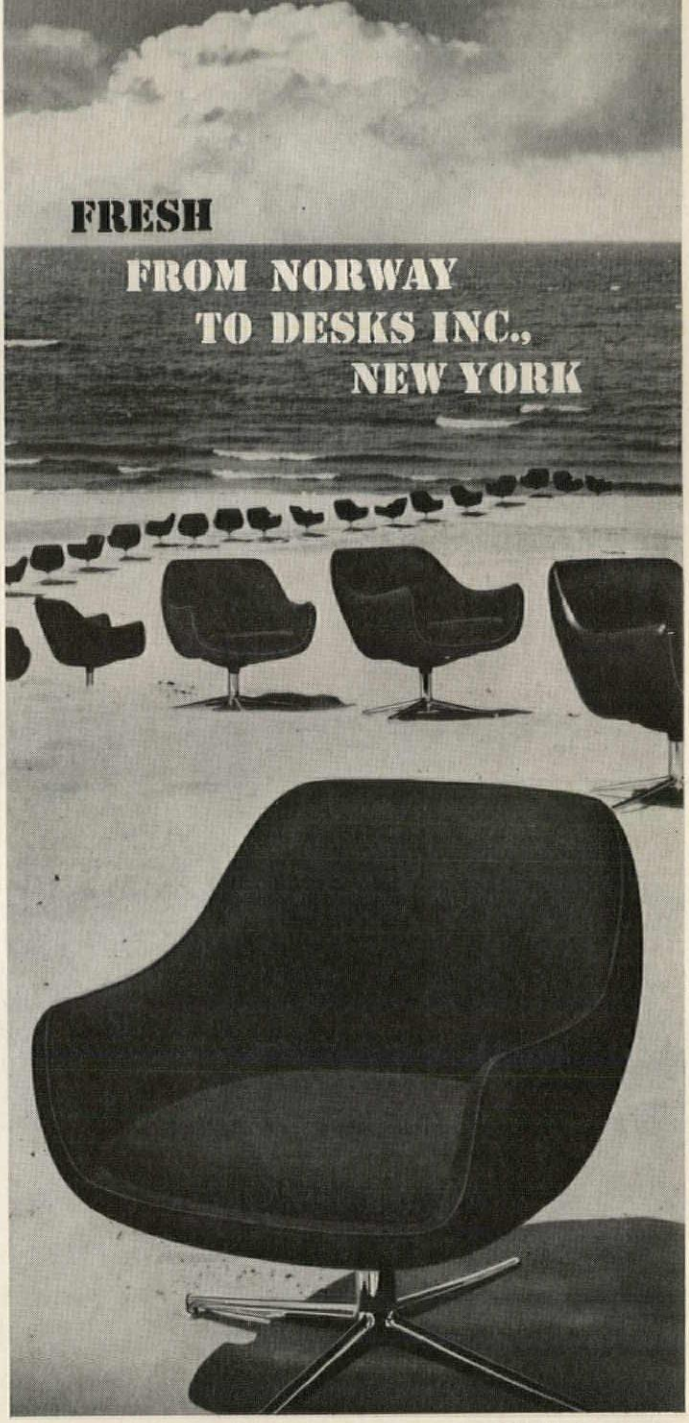
4. Smooth, rapid operation does not slow down high-speed traffic.

Write for detailed specification data. For price information on specific installations, please include size of door openings.

RUBBAIR DOOR DIVISION

STIC-KLIP MANUFACTURING COMPANY, INC.
10 Regent Street, Cambridge 40, Massachusetts

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Desks Inc.

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Grassweave Pattern

Bamboo Pattern

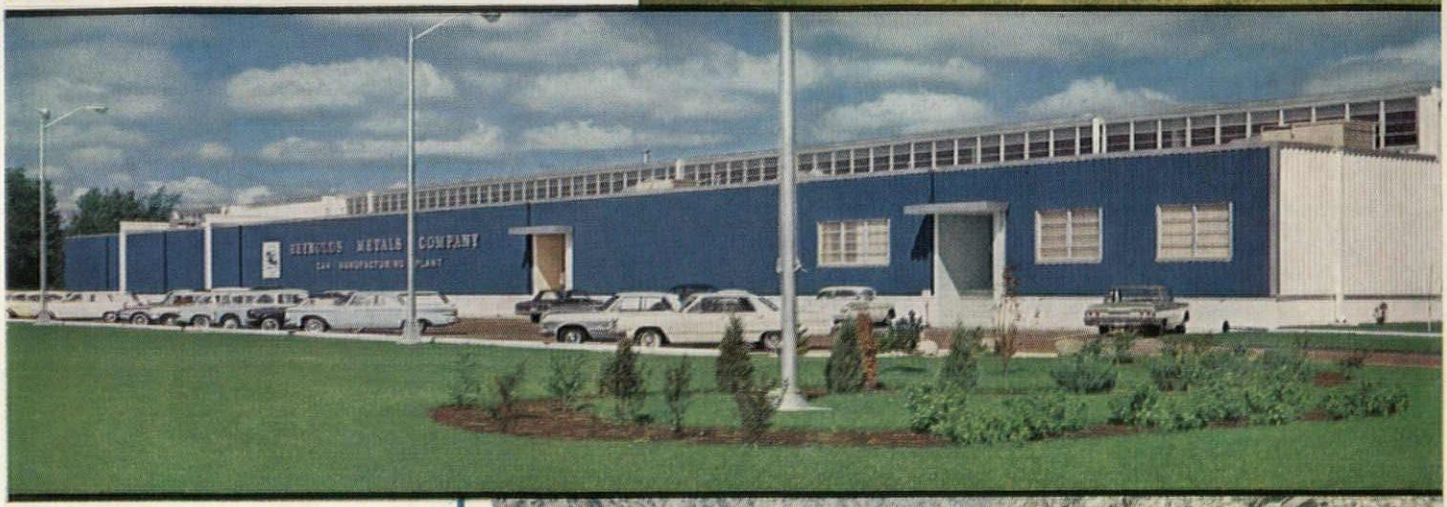
Exotic new patterned glass "originals" from L·O·F

■ They're called Bamboo and Grassweave. We created them to complement oriental settings . . . or any modern styling that calls for imagination and excitement. Use them wherever you want glass walls or panels for light, with translucence for privacy. American-made. L·O·F offers you 13 patterns from which to choose. All are readily available. See them at your nearby L·O·F distributor or dealer (listed under "Glass" in the Yellow Pages). Or call him for samples.

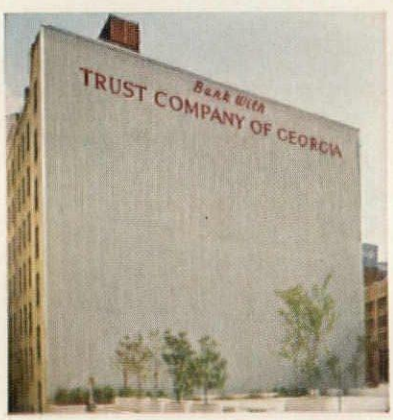
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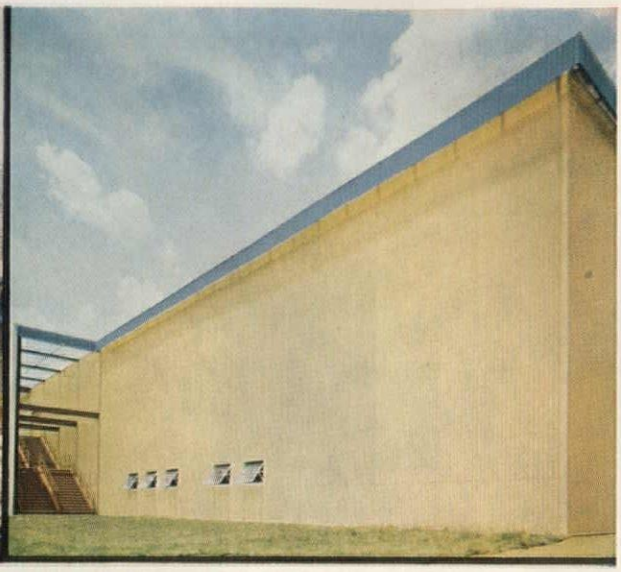




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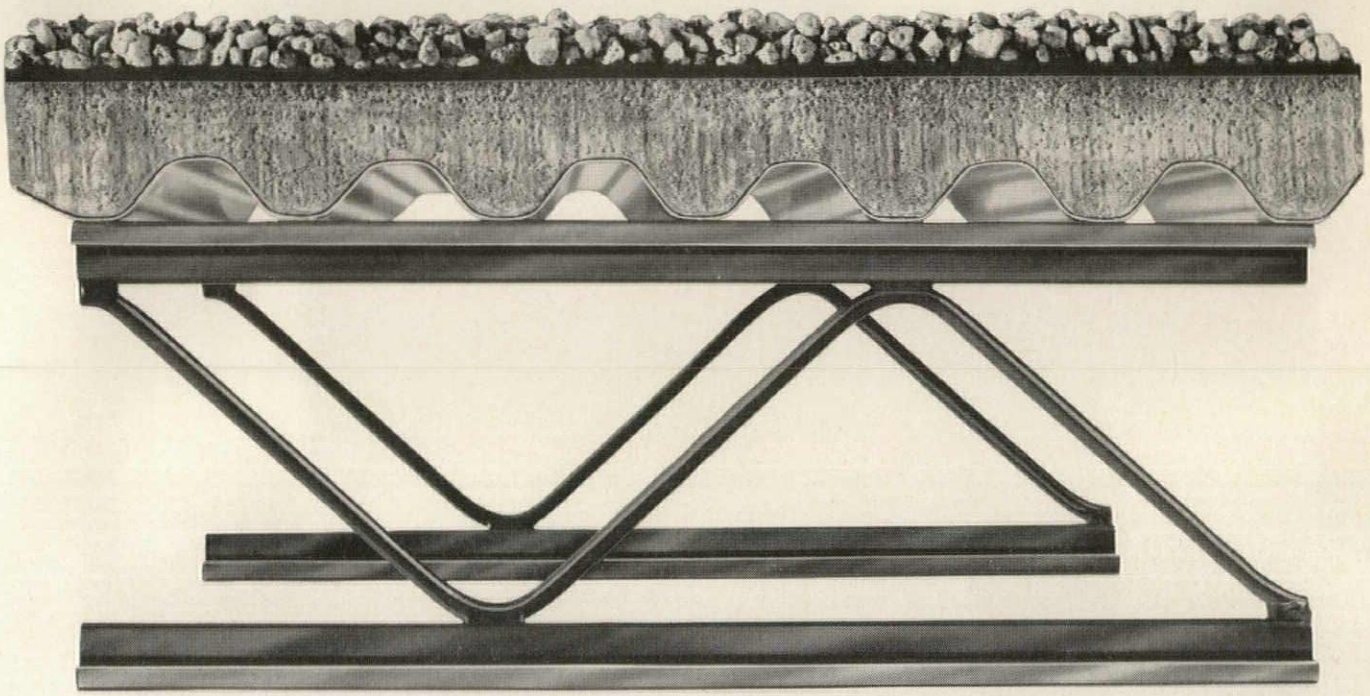
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What do you expect for 8¢?



A roof deck like this costs $1.00 per square foot.* Joists 40¢, galvanized steel form 20¢, concrete 22¢, built-up roofing 18¢. This *includes* 8¢ worth of Permalite perlite concrete aggregate.

What does the 8¢ buy?

A better *all-around* deck with actual savings on the entire roof system. Here's how:

INSULATION: Permalite concrete, with a "K" of 0.58, *is* the insulation. Eliminates the need for other insulating materials; cuts heating and air-conditioning costs.

LIGHTWEIGHT STRENGTH: The deck shown, including steel form and concrete, weighs only 6½ pounds, and is stronger than other concretes in its class. Saves steel.

FIREPROOF: Permalite is non-combustible and carries maximum UL approved fire rating when supporting members are protected. Insurance costs less.

PERMANENT: Permalite and Portland cement is *true* concrete. There is no structural loss due to possible leaks; the insulation remains efficient for all the years you design into the building.

Put these and other Permalite features together into *one* roof deck and have a *combination* of advantages you can't get in any other type of roof . . . 8¢ well spent when you specify Permalite.

*Based on 2" of Permalite concrete over top of steel form corrugations, using cost averages of major market areas.

Permalite® LIGHTWEIGHT INSULATING CONCRETE

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Robert E. Lamb, Inc., Valley Forge, Pa. Murray quarry floor is 6" x 6" x ½", Fawn Gray. Architect: Jules Gregory. Tile Contractor: Wissahickon Tile Company. Plate 510.

This Murray quarry floor will always look good

It will take all the heavy daily traffic this busy construction office lobby is subject to—and never show a sign of wear. Not this year nor fifty years from now.

Nor will it show soil readily.

Tracked-in dust and dirt can't penetrate Murray quarry's extra-dense, smooth natural surface. An easy damp mopping keeps it clean. And the narrow ⅛" joints that Murray's uniform sizes permit help further to cut maintenance to a minimum.

That's why the architect specified American Olean's Murray quarry tile here.

Another reason—the pleasing warmth and character of the subtle Fawn Gray color. It blends handsomely with brick walls, wood paneling and clean-lined modern furnishings.

For full information on our nationally distributed Murray quarry tile line, write for complete product catalog.

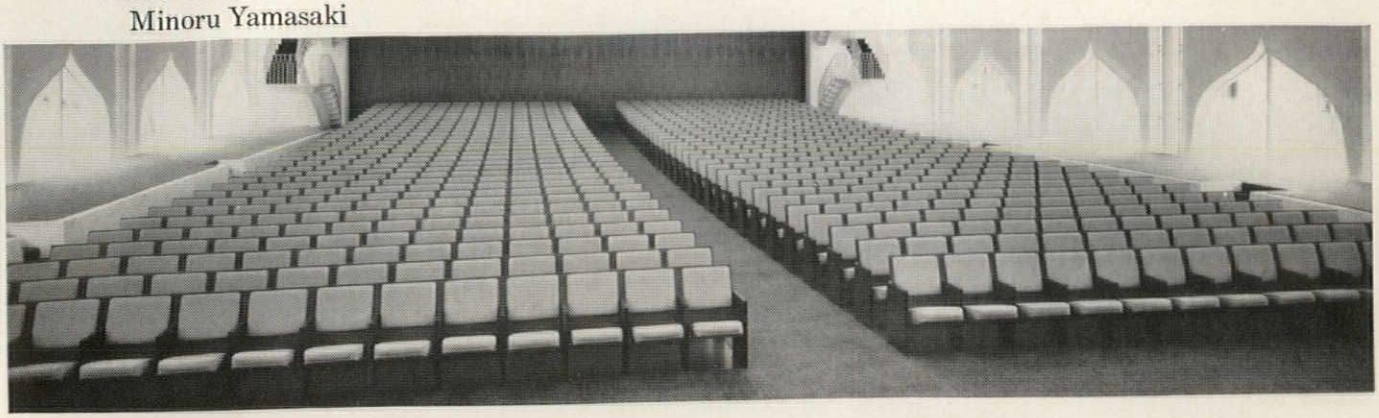
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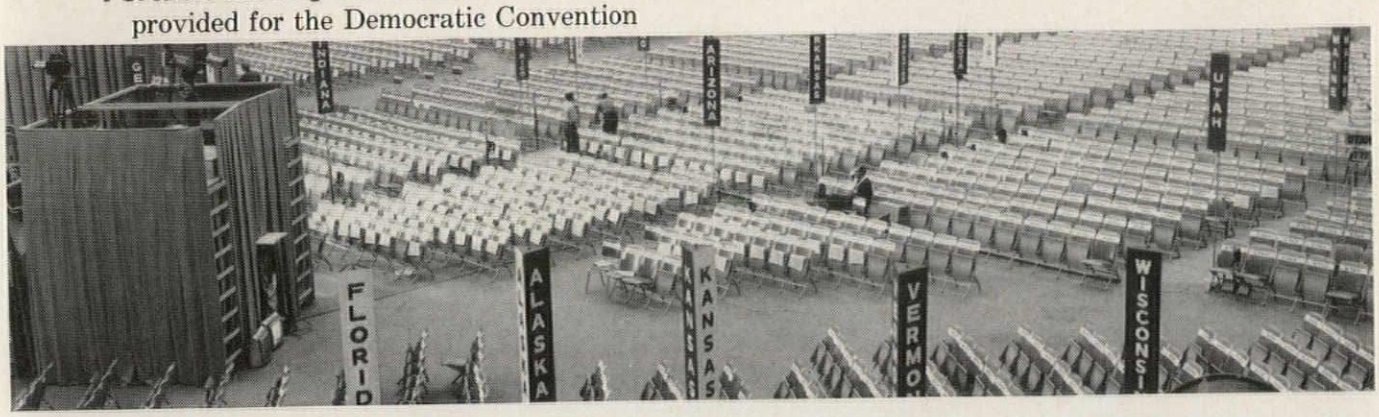
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Comfort-Engineered Seating *by* HEYWOOD-WAKEFIELD

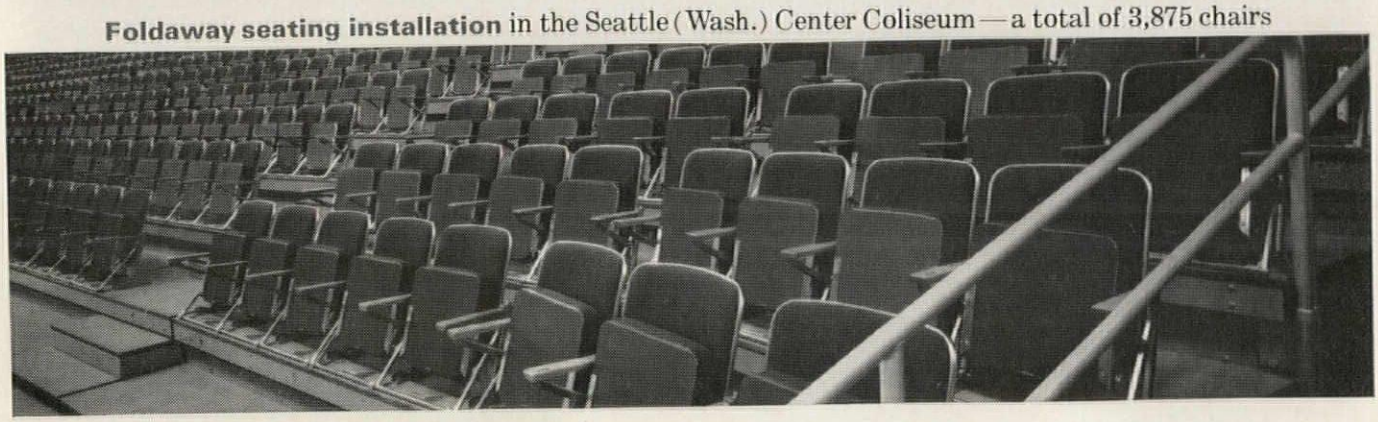
Fixed seating installation in the Congregation Israel Temple, Glencoe, Illinois, designed by Minoru Yamasaki



Portable seating installation at Convention Hall in Atlantic City. A portion of the 7,000 seats provided for the Democratic Convention



Foldaway seating installation in the Seattle (Wash.) Center Coliseum — a total of 3,875 chairs



These three entirely different types of seating installations are typical of Heywood-Wakefield's ability to supply superior seating to meet the varied requirements of every type of auditorium or arena. No matter what the seating problem, or whether it involves floor or riser installation, there is a Heywood-Wakefield design to meet your requirements. Write for complete folio — or see Sweet's Catalog, Section 36d/He.

HEYWOOD-WAKEFIELD
EST. 1826

Menominee, Michigan

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throughout the ages—through coordination of color, creative themes and motifs.

MOUNT AIRY GRANITE is as modern as today, yet will endure for the centuries. Distinctively different, the sparkling quartz particles enhance the clean lines of the structure—lend added interest to large plain surfaces. Consultations, preliminary estimates, and samples available without obligation.

Versatile and decorative, Mount Airy Granite offers creative possibilities when used as facing or for complete structure—equally effective in classical or modern architecture.



Ancient granite figure of Rui, High Priest of Amen (about 2000 B.C.), 3 ft. high. Now in The British Museum.

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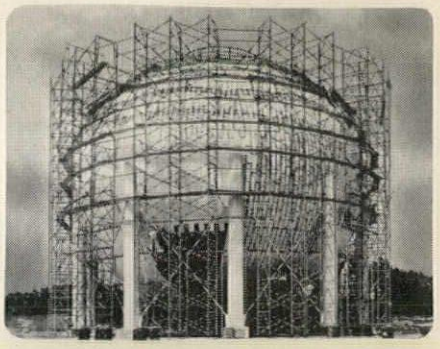
NORTH CAROLINA GRANITE CORP.

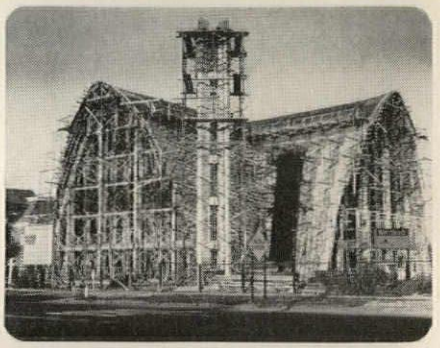
MOUNT AIRY, NORTH CAROLINA

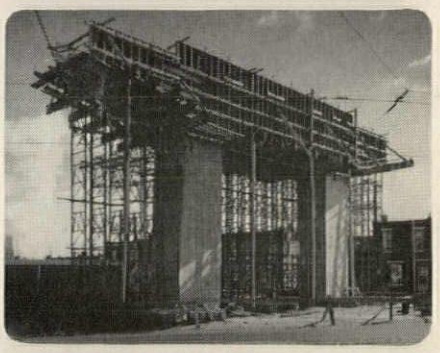
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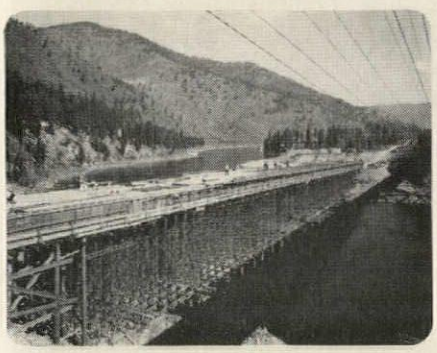
for safety.....

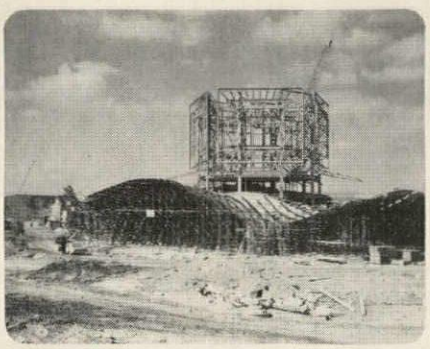
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Safway Scaffold Equipment is engineered for safety . . . fabricated of high grade structural steel, and manufactured under rigid "quality control inspection" standards. Load tests performed on Safway equipment are based on testing procedures and standards as recommended by the Steel Scaffold and Shoring Institute, and as witnessed by the Pittsburgh Testing Laboratories. Safway makes no compromise to give you dependable equipment. . . . "it's the standard of the construction industry".

For the every-day need, or the unusual, in scaffold and shoring jobs, you can rely on Safway for safety engineered products and experienced field service. Safway equipment is available at sales and rental outlets throughout the United States, Alaska, Hawaii, and Puerto Rico.

Write today for your free copy of Scaffold Safety Rules — Safway's New 12 page illustrated catalog — and your nearest Safway dealer's address.

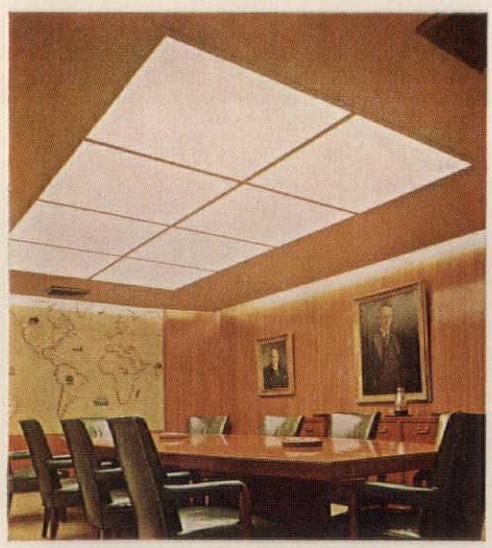
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That's what sets PLEXIGLAS® apart from all other plastics for lighting —its resistance to yellowing in long-time service. These lighting panels were installed 12 years ago in the president's office and board room of Lone Star Cement Corporation, New York City. Photos show them as they appear today.

Notice the complete absence of yellowing. The lighting is as pleasing and efficient as the day it was installed—proof that PLEXIGLAS has met the ultimate test of long-time service—proof that PLEXIGLAS will last the life of a lighting fixture. In addition to resistance to discoloration, the breakage resistance, light weight and ease of handling of PLEXIGLAS make it the outstanding material for your lighting requirements.

For lighting that stands out and stands up, specify PLEXIGLAS. Write for literature and the names of manufacturers of lighting equipment utilizing diffusers and lenses of this Rohm & Haas *100% acrylic* plastic.

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Now silence comes factory-clad in aluminum

(and in four gleaming colors)

ACOUSTI-CLAD



Shown above are silver, copper and gold Acousti-Clad in the regular diagonal pattern. White Acousti-Clad is shown in the random bold pattern.

There's a bright new look in acoustical ceilings. Johns-Manville Acousti-Clad* . . . the world's only metal-faced ceiling tiles so light in weight, they can be cemented as well as hung.

Acousti-Clad, factory-faced with aluminum in silver, gold, copper and white, makes the dullest room glow with splendor the year 'round. And, the rigid core material, formed from either expanded perlite or mineral fibers, has millions of tiny air cells to absorb sound, reduce noise.

Acousti-Clad's gleaming beauty is ideally suited to schools, laboratories, restaurants, hospitals, conference rooms, offices, banks, stores and lobbies. Acousti-Clad is highly incombustible (flame resistance E84—Class I). It's highly moisture resistant. It can be easily cleaned with any good detergent.

For all the glowing details, write to Johns-Manville, Box 111, New York, N. Y. 10016. In Canada: Port Credit, Ontario. Cable: Johnmanvil.

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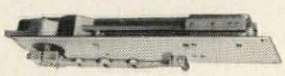
Johns-Manville

JOHNS-MANVILLE JM PRODUCTS

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Beautiful way to say "Panic Exit," but where's the door closer?

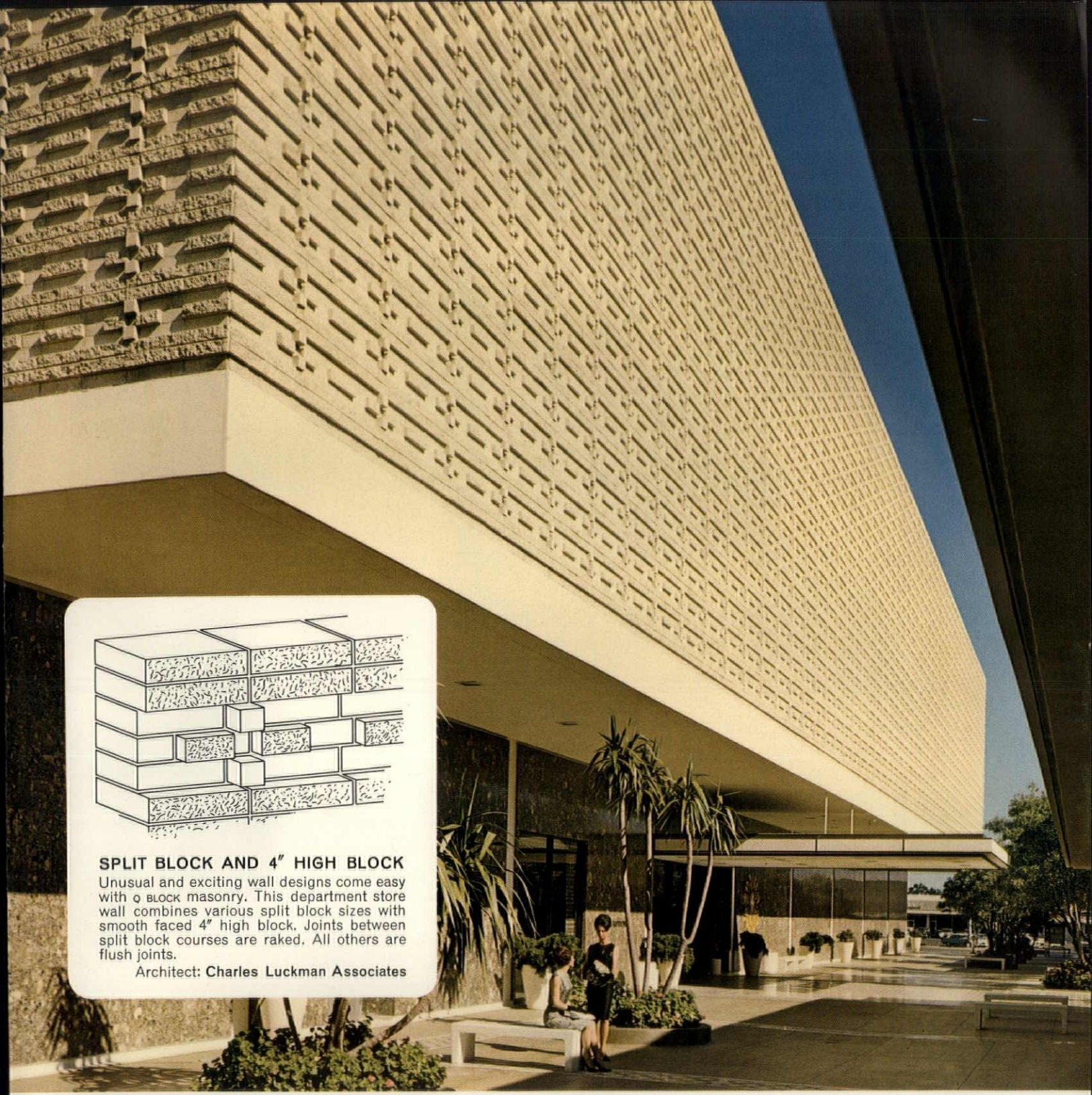


The beauty of it is you don't see it. The door closer is completely concealed. So are the vertical rods on the panic exit device, and the top and bottom latch bolts as well. And you don't see how beautifully it works—quietly, smoothly, efficiently. What you do see is the graceful oval crossbar, smartly styled in anodized aluminum, adding a note of elegance. It's Yale's way of combining beauty and function. And who but Yale could offer such integrity of design—visible or invisible?

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Unusual and exciting wall designs come easy with Q BLOCK masonry. This department store wall combines various split block sizes with smooth faced 4″ high block. Joints between split block courses are raked. All others are flush joints.

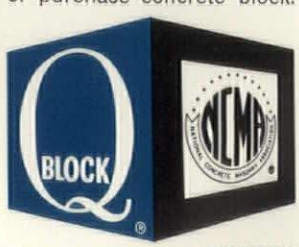
Architect: **Charles Luckman Associates**

Q BLOCK® wall creations

today's smartest way to put quality into every wall!

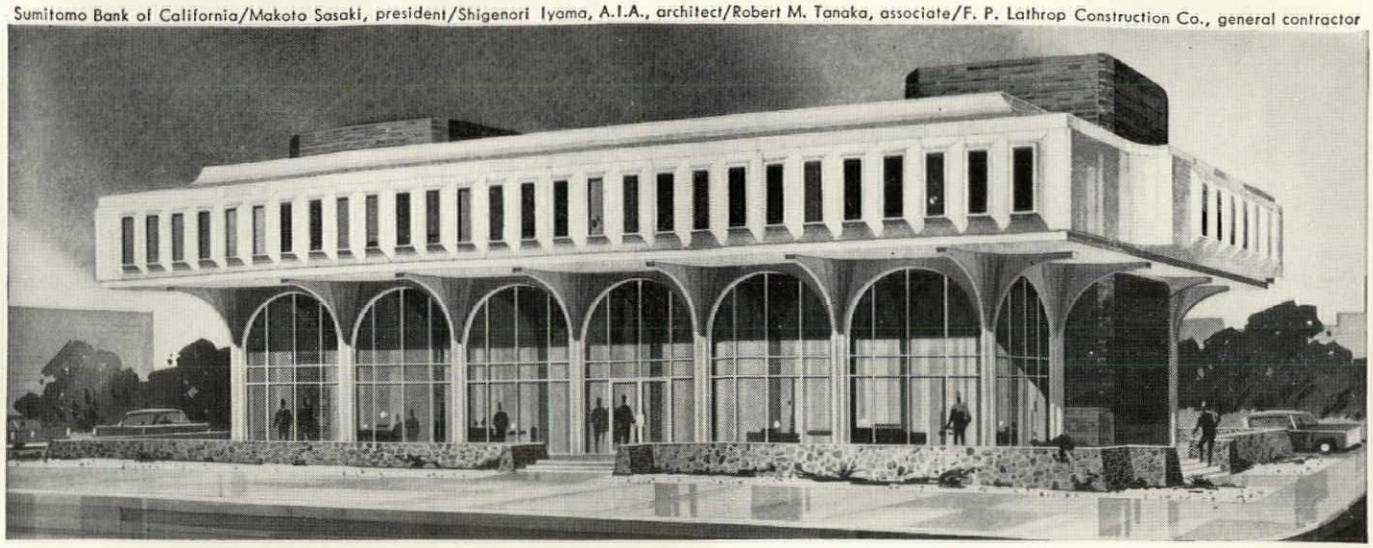
Q BLOCK masonry, as you know, is the new standard of excellence for concrete block established by the National Concrete Masonry Association. Q BLOCK masonry enables you to design and build with new quality and greater confidence. Only NCMA members can make Q BLOCK masonry, and their products are tested at regular intervals by accredited laboratories to assure that Q BLOCK standards are maintained. Write for the name and address of your nearest Q BLOCK producer.

Look for this Q BLOCK Certification wherever you specify or purchase concrete block.



NATIONAL CONCRETE MASONRY ASSOCIATION • 2009 14th STREET NORTH, ARLINGTON 1, VIRGINIA

Sumitomo Bank of California/Makoto Sasaki, president/Shigenori Iyama, A.I.A., architect/Robert M. Tanaka, associate/F. P. Lathrop Construction Co., general contractor



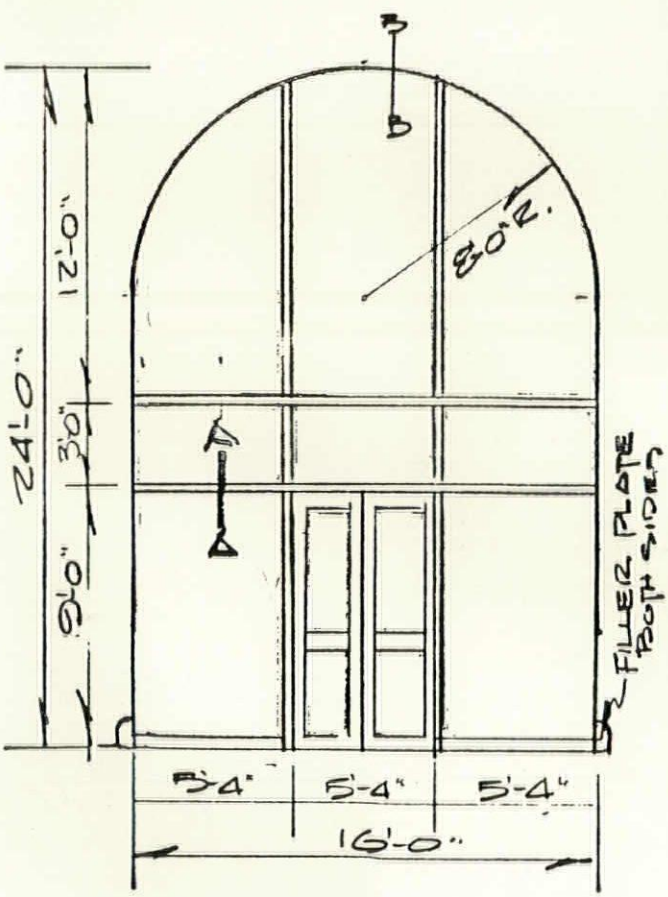
How to put up a good front in the banking business

When Shigenori Iyama and his associate, Robert Tanaka, designed the new Oakland branch office of the Sumitomo Bank of California, they created three entrances that would not only carry out the bank's clean, modern appearance but would also endure for years under the anticipated heavy traffic.

They found a practical answer in stainless steel entrances, manufactured by The Alumiline Corporation, Pawtucket, R. I., from stainless steel sheet provided by Jones & Laughlin Steel Corporation. The stainless motif was also carried out in the design of the sixteen windows, where stock stainless framing was utilized.

What made the stainless steel entrances and windows practical was the mass production technique developed by Alumiline. The high strength/weight ratio of stainless was an added factor. The lasting beauty, low maintenance cost and durability of stainless were also plus advantages.

If you have a design idea that involves stainless doors and entrances for commercial or monumental buildings, contact The Alumiline Corporation. For further information concerning stainless steel, let us refer you to our Architectural Services.



Jones & Laughlin Steel Corporation
STAINLESS AND STRIP DIVISION • DETROIT 48234

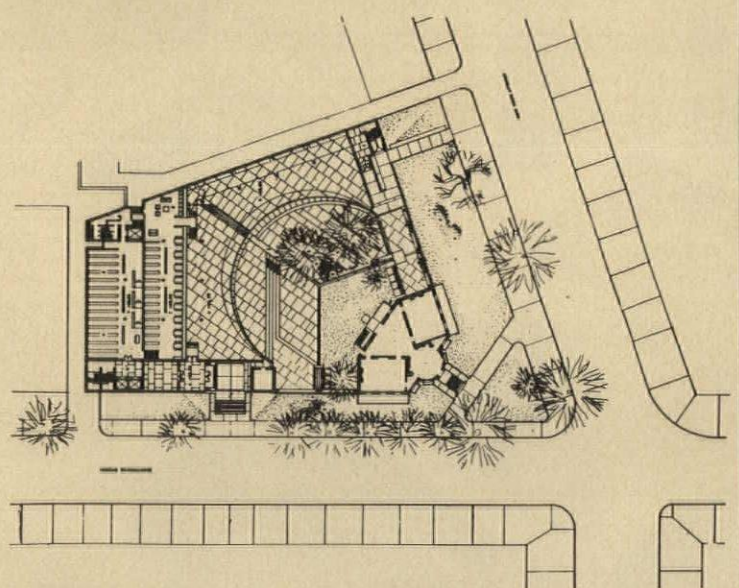
STAINLESS

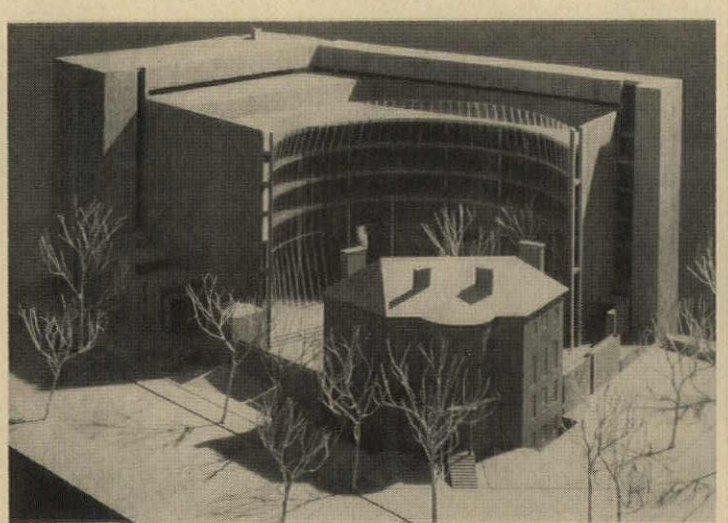
NEWS REPORT

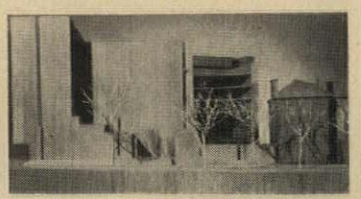
Architecture's Monthly News Digest of Buildings and Projects, Personalities, New Products

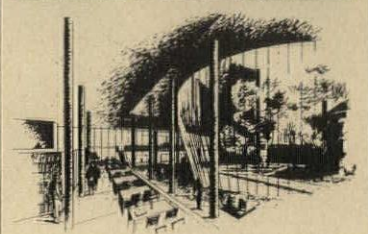
AIA Headquarters Plans Released

WASHINGTON, D. C. Mitchell/Giurgola Associates of Philadelphia have won the national AIA competition for the design of a new addition to the Octagon House, AIA headquarters. The winning design was picked from seven finalists in the competition, which drew 221 submissions. According to the competition criteria, the design was to be of "a building of special architectural significance, establishing a symbol of the creative genius of our time, yet complementing, protecting, and preserving a cherished symbol of another time, the historic Octagon House." Fortunately, Mitchell/Giurgola's design does just that, and does it more eloquently. Plans call for a five-story, red brick structure, with a glass shielded semicircular front wall that embraces the Octagon House and its gardens, at the corner of New York Avenue and 18th Street. The new building, with its approximately 50,000 sq ft of floor space, will be constructed at an estimated cost of $1,450,000. An additional $30,000 has been set aside for sculpture and other art, some of which will be displayed in a ground floor gallery.









Jurors for the competition were architects Hugh Stubbins, chairman, Cambridge, Mass., Edward Larrabee Barnes, New York City, J. Roy Carroll, Jr., Philadelphia, O'Neil Ford, San Antonio, and John Carl Warnecke, San Francisco. A. Stanley McGaughan, Washington, D.C., was professional advisor. According to Chairman Stubbins, "Most important, perhaps, is that the concept fulfills the stated requirement of demonstrating that a distinctive contemporary building can live in harmony with fine architecture of a former time."

The Octagon House, of course, was completed in 1800, 57 years before the formation of the AIA, and was purchased by the AIA in 1899 for $30,000. In 1961, it was designated a Registered National Historic Landmark. And on a list released last month of "landmarks of great importance [which] must be preserved," it followed only the White House and the Capitol.

"Good Luck, Mr. Pei!"

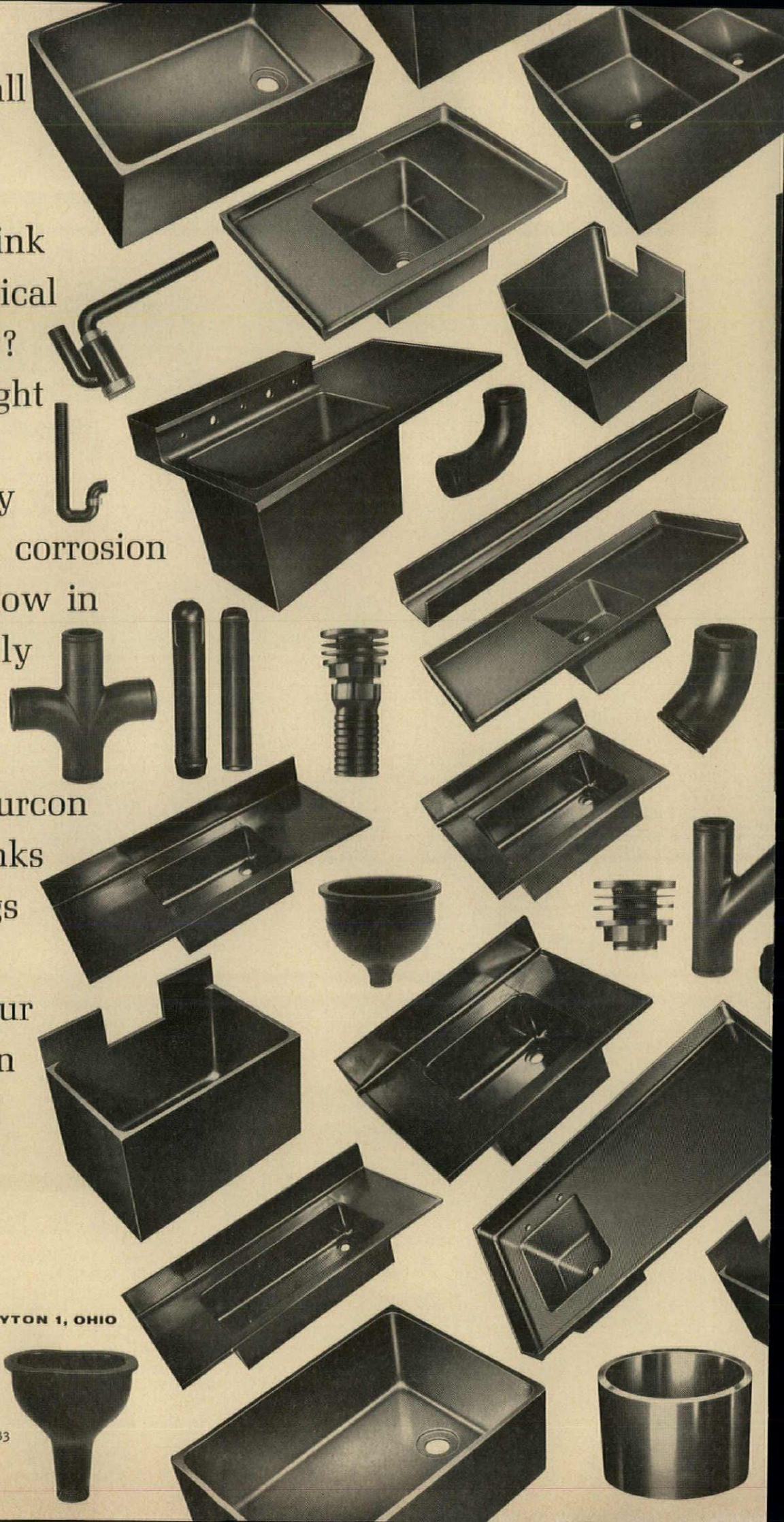
NEW YORK, N. Y. With these words, Senator Robert F. Kennedy wished I. M. Pei fair sailing in his design work for the John F. Kennedy Memorial Library at Harvard University. The selection of Pei as architect for the library was announced at a press conference in New York's Hotel Pierre in mid-December, ending months of speculation over who would get this architectural plum. In addition to the Senator, the meeting was addressed by Harvard President Nathan M. Pusey, who outlined plans to make the library the base of an institute devoted to the continuing study of politics; by Eugene Black, President of the World Bank, who reported that fund raising for the library is continuing most successfully; and by William Walton, family friend and chairman of the President's National Committee on the Arts, who told of the meeting with 19 noted architects on the site to discuss the approach to such a project, and the subsequent visits by a selection subcommittee to a number of architects' offices in the search for the right designer. The dais was also graced by Mrs. John F. Kennedy, who, however, did not speak. Until details of the library-institute set-up are ironed out between library trustees and university officials, Pei will not be able to proceed with definite plans. In the meantime, we add our good wishes to Pei for an outstanding performance.



GM on the Plaza

NEW YORK, N.Y. Poised opposite New York's venerable Plaza Hotel, like a *nouveau-*

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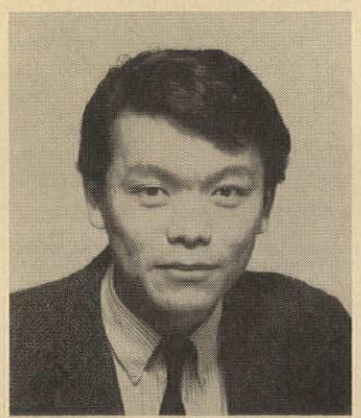
riche nephew come to visit his "genteel" relations, the General Motors building, if built according to its preliminary design, will drastically alter one of the city's few areas of Old World charm. Planned to take the place of the Savoy Plaza Hotel on Fifth Avenue at Grand Army Plaza, plus two smaller buildings on the Madison Avenue end of the block, between 58th and 59th Streets, it has been designed by Edward Durell Stone with Emery Roth & Sons as Associated Architects (as announced in the NOVEMBER 1964 P/A). It is a 48-story blockbuster of a building of the type found grouped around Rockefeller Center on Sixth Avenue, and along the wide open stretches of Third Avenue. When seen with its peers, it would seem an advance over New York's indigenous metal-and-glass office buildings. But in a group of sedate older buildings, it is liable to be as conspicuous as Gulliver in Lilliput. Nor is size its only anachronistic feature. With its white stone or marble facing on exterior steel supports, it will make a statement of vertical strength in an area whose major statement is not strength but dignity. Its crispness and rigidity are more suited to the corporate parade field of Park Avenue than the formality of the "parlor" where it finds itself. As the major tenant of the building, which is being built as an investment by the Savoy Fifth Avenue Corporation, a British-connected firm in which General Motors has a 50 per cent interest, the automobile company plans to use the ground floor as a car showroom, a serious affront to the present gracious nature of the area. The building will be set back 100′ from Fifth Avenue, and contain two sunken, shop-lined plazas. Two 21′-high outriggers, (a concession to the building code) flank the building on 58th and 59th Streets, and these too will contain shops. The Madison Avenue side of the building will also be set back from the street. But even this modicum of open space will be intimidated by the mass of the building, the largest permitted by the zoning law on a 200′x400′ site.

Announcement of the plans came as a surprise to most news media; the story was "leaked" through *The New York Times*, which commented on the building noncommitally. It was also a surprise to a committee of three architects set up by the Fifth Avenue Association in September to confer with the building's sponsors. Although the committee had been promised an advanced look at the plans, they were not consulted.

Stone has said he wants "to salute the skyline and enhance one of New York's finest neighborhoods." While this building may achieve the former goal, it will fall lamentably short of the latter.

Roosevelt Memorial Approved

WASHINGTON, D. C. The Roosevelt Memorial Commission has approved plans for the controversial Franklin Delano Roosevelt Memorial (p. 59, AUGUST 1964 P/A). Although the Roosevelt family was—and still is—opposed to the design, feeling that it is not in keeping with President Roosevelt's classical taste in architecture, the family serves in no official capacity. According to Commission Chairman Francis Biddle, who was Attorney General under Roosevelt, the Commission has given "very careful consideration to the objections." It will now hold meetings to decide how to raise the $4.5 million needed to build the monument.



New P/A Art Director

This month's cover and the layout of the P/A OBSERVER section are the work of P/A's new art director, Gary Fujiwara, who will take over responsibility for the rest of the magazine's layout starting with the February issue. Formerly art director of *Interiors* magazine, he was educated at Los Angeles' Art Center School, and most recently was an interior planner and furniture designer in the New York office of Skidmore, Owings & Merrill.

Narrows Span Opened

NEW YORK, N. Y. Robert Benchley, who rarely went outdoors, knew little about bridges. They puzzled him. "What's the first thing you do if you are about to build a bridge?" he often asked. Although the answer eluded Benchley, the answer to this and other bridge building questions are almost second nature to Othmar Ammann and his associates in the engineering firm Ammann & Whitney. Their latest bridge, which spans the Narrows between Brooklyn and Staten Island at the mouth of New York harbor, was opened to traffic on November 21.

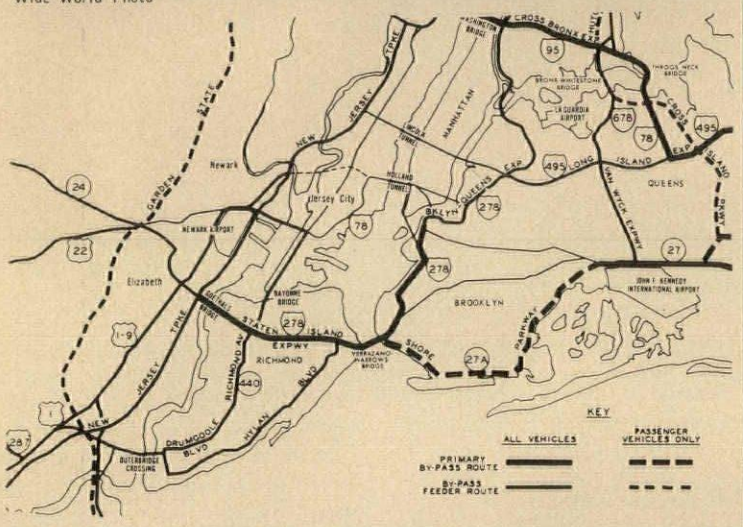
Started in 1958 with engineering surveys, the Verrazano-Narrows Bridge (half-named for Giovanni da Verrazano, Italian explorer in the service of France who was possibly the first European to enter New York Bay; he turned around and went right back out) took six years to complete and cost $325 million, $15 million below the original estimate. But despite the impressive price tag, and even though the bridge is being widely billed as the world's longest suspension span, (it stretches 4260′, 60′ more than the Golden Gate Bridge), its most impressive feature is its total size. Its twin towers each reach 690′ above mean high water, 240′ higher than the Cheops, and about the height of a 57-story building. The towers are spaced so widely apart that the curvature of the earth demands they be 1⅝″ farther apart at the top than at the bottom.

To lend stability to the gigantic span, Ammann gave the bridge a lower as well as an upper deck, providing a potential 12 lanes, although the 6-lane upper deck is expected to be adequate for at least 10 years.

With its completion, the bridge provides a more convenient route for motorists around New York City from southern New Jersey and the New Jersey Turnpike to Long



Wide World Photo



Island. And it completes the last link of the southern bypass route planned by the Port of New York Authority and the Triborough Bridge and Tunnel Authority in 1955. It is expected to handle 48,000,000 cars a year.

Two complaints have been voiced about the bridge: first, that it makes no provision for pedestrians who would like to hike across the Narrows; and second, that it opens the way to speculators who will undoubtedly ravish the rural charm of Staten Island unless wise precautionary measures are taken by the borough and city governments.

Boston To Be Renewed by 1975

BOSTON, MASS. Urban renewal is gaining both momentum and status. Some years ago, when asked what had caused the decline of burlesque, Gypsy Rose Lee replied "urban renewal" (a literal fact in Boston's Scollay Square). Since then, it has come a long way. By the end of 1963, local renewal agencies had acquired nearly 2½ times as much land as the combined total of all previous years through the end of 1960. And between June 1962 and December 1963, the amount of land with redevelopment completed increased from less than 2800 acres to 5000 acres, or almost 83 per cent. In all, there are some 1500 urban renewal projects under way in 750 U.S. cities. One of the most ambitious of these is the over-all plan announced as a suggested guide last month by the City of Boston. It anticipates giving the city a $3.6 billion face-lifting in the decade ending in 1975.

Boston is no newcomer to urban renewal. Even before the 1965-1975 General Plan for the City of Boston and the Regional Core was announced, Boston had eleven urban renewal projects—five being planned and six being executed. These involved more than 2100 acres and an investment of over $700 million. What the new over-all plan is intended to do is give cohesion and direction to these individual plans, integrating them into a master plan that will affect the entire city.

Boston's concern with urban renewal is motivated by some pressing problems. For one thing, the lure of the suburbs drained the city's population from a high of about 800,000 in 1950 to its present level of near 700,000. For another, general decay of business conditions coupled with the population loss eroded the city's tax base. According to Boston Redevelopment Authority Administrator, Edward J. Logue, "Without an urban renewal program, the tax base of the city would be destroyed." Actually, Boston has had a master renewal plan for almost 14 years. But the last plan, adopted in 1951, is now sadly out of date. Because of Boston's constantly changing conditions, Logue believes a 10-year plan is more realistic than the plans some other cities are adopting, which project plans through to the turn of the century. By setting 1975 as a target date, Logue points out, "We give the plans a built-in sense of urgency." And 1975 is an historic year for Boston, which dates *its* independence from England to Paul Revere's ride and the skirmish at Lexington in 1775, instead of to the Declaration of Independence or the end of the Revolution. To mark both two centuries of independence and, hopefully, the completion of the 10-year urban renewal program, Boston plans a World's Freedom Fair in 1975.

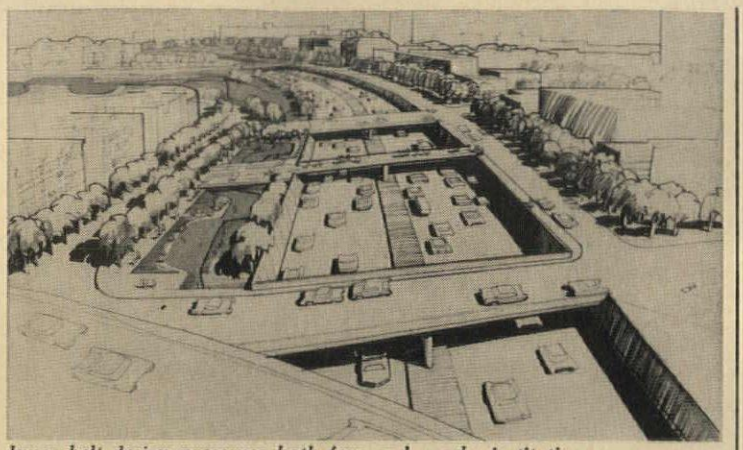
Logue believes the master plan will maintain the neighborhood quality of Boston's historic areas by keeping them somewhat isolated. At the same time, he hopes to provide better transportation among them with limited new highway construction, an extension of the city's rapid transit lines (some of which may operate on existing railroad tracks), and the addition of over 25,000 new parking spaces. According to figures gathered by the Authority, Boston is a walking town. The distance walked by the average pedestrian each time he ventures out in downtown Boston is 1400′. This compares with a U.S. average of 600′. The plan hopes to make walking in Boston even more pleasant.

Specifically, the most important provisions of the plan are: (1) the elimination of 3000 acres of unused, vacant land. The planners forsee an increase of the land used for public facilities by 44 per cent; for commercial purposes by 29 per cent; for open spaces, such as parks, by 21 per cent; for industry by 9 per cent; and for residential use by 4 per cent; (2) the rehabilitation of 32,000 existing housing units (29,000 of which are substandard), and the construction of 37,000 new housing units; (3) the construction and modernization of $287 million worth of municipal facilities—mostly schools; (4) the creation of new land for open space, industry, and commerce by filling in parts of the Fort Point Channel, and the development of air rights over the turnpike extension and railroad yards; (5) reclamation, for recreation, of the Neponset River, the harbor shoreline, large sections of foreshore between the Neponset River and Columbus Park, the Harbor Islands, and the Harborside area around the Fort Point Channel.

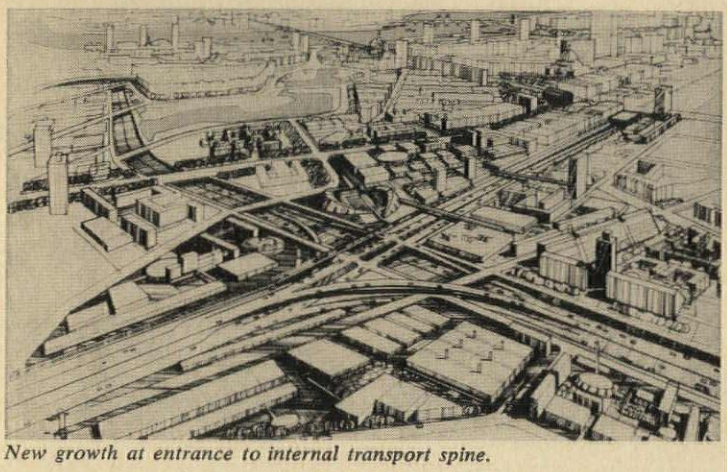
Of the estimated $3.6 billion needed to carry out the plan, an estimated $2 billion will come from private sources. In addition, the City of Boston will contribute $287 million; Massachusetts will contribute $152 million (half of it for state buildings), and the Federal Government will make available $455 million ($248 million in renewal project grants).

If approved by a citizen's advisory committee, the plan will be adopted as a guideline by the Mayor, and it will be used subject only to the City Council's approval of specific provisions as they get underway, where and when the City Council has jurisdiction. None of it will be put into effect "without first seeking the views and winning the support of locally responsible groups."

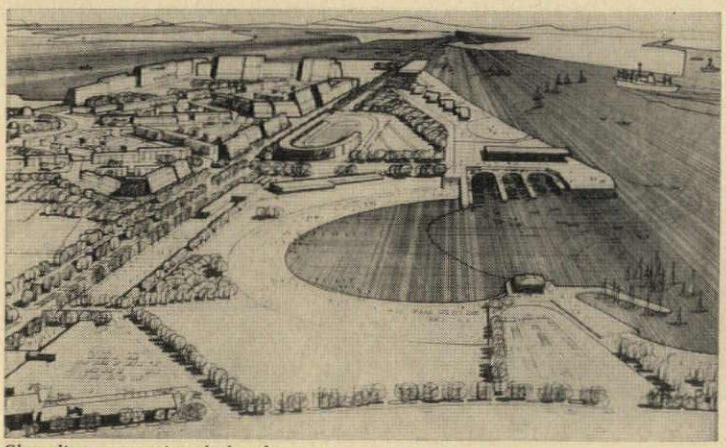
Education is, of course, one of the tasks of an urban renewal agency. But Boston's task, although made somewhat easier by the historic character



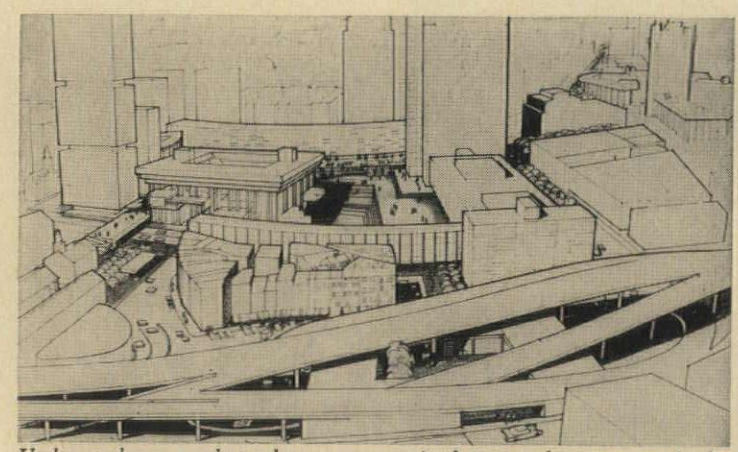
Inner belt design preserves both fens and nearby institutions.



New growth at entrance to internal transport spine.



Shoreline recreational development.



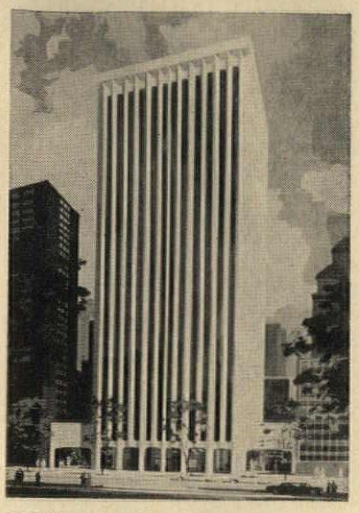
Under-roadway market plaza restores tie between downtown and the North End.

of the city, is also hampered by the same historic charm. Boston's winding, narrow streets divide the city into ungeometric sections instead of square blocks. Property values on the same street may vary widely and present an almost impossible task to anyone trying to gather all buildings and property in an area into a renewal project.

Despite these impediments, Boston's developers are optimistic, partly because of the project's work already underway. One hopes that their plan, with its heavy emphasis on arterial roadways, is farsighted enough to make Boston's *next* redevelopment project possible.



The man responsible for producing the 1965-1975 General Plan for the City of Boston is David A. Crane, Planning Administrator for the Boston Redevelopment Authority. Although Crane's work is not as widely known as that of, say, Edmond Bacon in Philadelphia, this plan may be one of the largest, most comprehensive city redevelopment plans since Baron Hausmann redesigned Paris for Louis Napoleon in the middle of the 19th Century. Before going to work for the City of Boston in 1961, Crane worked as an architect and site planner in Cambridge, New York, and Philadelphia. Also during those pre-Boston years, he found time to spend a year as an Italian Government Traveling Fellow in Architecture and Town Planning, and semesters at MIT, where he was a research assistant in the School of Architecture and Planning, and at Harvard, where he was visiting critic of urban design in the Graduate School of Design. For four years Crane was an assistant professor of architecture and city planning at the University of Pennsylvania School of Fine Arts. While there, he served as project director in charge of architectural and town planning education for the Ford Foundation mission to Pakistan. Crane graduated from the Georgia Institute of Technology in 1950 with Bachelors degrees in Science and Architecture, and he received a Masters degree in city planning from Harvard in 1952.



Filling the Cavity

CHICAGO, ILL. The image of the American Dental Association is opening wider as work starts on its new $14-million, 23-story headquarters here. Designed by Graham, Anderson, Probst & White, Inc., the building's façade will have series of long, massive, gleaming columns of precast concrete, formed with white cement and a crystal quartz aggregate. Bronze-tinted glass in aluminum sashes will fit between the columns. A central service core will take the place of interior supporting columns. Pockets in the outer face of this core, which houses utilities, stairs, elevators, washrooms, ventilation ducts and piping, will support the inside ends of floor beams.

Post-Jefferson Commission

CHARLOTTESVILLE, VA. Pietro Belluschi and Sasaki, Dawson, DeMay & Associates of Massachusetts are designing a new School of Architecture for Thomas Jefferson's University of Virginia. The school will be the first element in a Fine Arts

Center that will eventually include drama facilities, a concert hall with related practice and instruction areas, and an art building.

The Architect and the Computer

BOSTON, MASS. Well over 500 registrants gathered for the First Boston Architectural Center Conference, December 5, at which "Architecture and the Computer" was the subject evaluated. H. Morse Payne, President of the Center, expressed gratification at the unusually large turnout and revealed that early estimates had not exceeded 200, although he had previously predicted that "this conference undoubtedly will be an important contribution to the architectural profession on a subject that will affect our professional future and will be an actual fact within five to ten years."

What this conference seemed to point up, however, was that the use of the computer presented one additional challenge to the architect's recognized role as the directing force in building (see the OCTOBER 1964 P/A, on "The Aesthetics and Technology of Preassembly," for another formidable challenging force).

The meeting clearly indicated that it has been the engineer who has taken greatest interest in and advantage of the potentials of the computer in building construction. Principal papers from the engineering point of view included discussions of the use of the computer for typical building engineering situations, determination of the optimum mechanical engineering system, scheduling of a construction project, computer-aided design through the use of a graphic communications, and systems analysis as applied to hospital planning. These papers were presented respectively by a consulting structural engineer (with architectural training), a chief mechanical engineer of Westinghouse, a specialist from IBM, a professor of mechanical engineering, and two representatives of Bolt, Beranek & Newman, Acoustical Consultants.

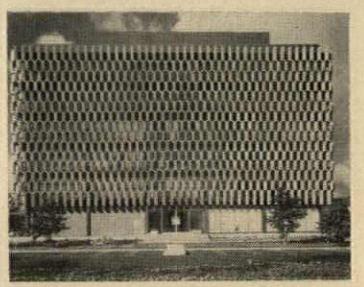
Perhaps of greater particular value to architects was Howard Fisher's review (he is an architect who identifies with AIP) of a technique he has developed for processing complex statistical data into meaningful graphic from; and the presentation by W. A. Fetter, from Boeing, of computer graphics emphasizing communication of spatial relationships between buildings and a moving viewer.

As all moderators, speakers, and panelists readily admitted, the computer is not a creative device, since one can only get back from it what has already been put in. It would seem that the engineers have been doing more of the "putting in" than the architects. Dr. Walter Gropius, of TAC, admonished that "if we look at these machines as potential tools to shorten our working process, they might help us to free our creative power. I wish we architects would keep an open mind toward these new possibilities offered to us by science." Professor Serge Chermayeff, of the Yale School of Art and Architecture, also stressed "the necessity of the architect in learning about the use of technical aids."—BHH

Breakthrough to the Hudson River

NEW YORK, N. Y. The rallying cry above is the title of a study prepared by some graduate students in Columbia University's School of Architecture. Developed under the guidance of Columbia professors Percival Goodman and Alexander Kossmanoff, the plan is a guide for the reclamation of the banks of the Hudson River. Since the 1840's, when the railroad first laid tracks along the river's east bank from Albany to New York, the river has been inaccessible to those living alongside it. The planners offer a threefold path to the rejuvenation and preservation of the area. First, they would save the large private estates that line much of the river, turning the land into public parks where necessary. Second, they would preserve existing open land by concentrating the growing population in planned "new towns." And third, they would rejuvenate existing centers, such as Tarrytown and Peekskill, by "providing easy access to the river, ample recreational facilities, imaginative housing, and new industry." The land along the Hudson is some of this country's most beautiful, and one hopes this proposal, while only a suggested solution, will be carefully studied by legislators and others who can do something about it. Brooks Atkinson, the erstwhile drama critic of *The New York Times* who now writes a column for that paper, called the plan "wholesome and attractive." But he added one note of caution. "This column," he wrote recently, "would like to take exception to one feature in the plan—the two chains of man-made islands across the wide bays on both sides of Croton Point. The wildlife of those bays—ducks, geese, gulls, terns, eagles, ospreys, cormorants with bitterns and herons in the nearby marshes—are among the Hudson's few remaining natural resources. Since there is no sociological need of taming the bays, the chains of man-made islands ought to be eliminated. The wildlife of the river is the only proof we have that the river is not dead yet." Actually the river is far from dead. Like a beauty from another era, it merely needs a face-lifting. The Columbia study was sponsored by the family of Richard L. Ottinger, an attorney from the area who was recently elected to Congress.





I-Bee-M

HONOLULU, HAWAII Sitting under their THINK signs, IBM employees may not look as busy as bees, but of course they are. The effect is heightened by the honeycomb exterior of IBM's Honolulu building. Designed by Vladimir Ossipoff, the 16-story building is enclosed by a concrete grille sunscreen composed of 1360 elements, 18 in. deep, 3 in. thick, and 12½ in. long. Because all angles in the screen are greater than 45° and because the sections join vertically but not horizontally, there are no corners, ledges, or holes to catch and collect dust or water or give house room to birds' nests. In-place cost of the sunscreen is about $3.50 per sq. ft.

The Reign of Spain

NEW YORK, N. Y. Take a left turn at the Great Sphinx and you will come upon the Metropolitan's "new" 16th-Century Spanish patio. Bequeathed to the museum in 1941 by the late George Blumenthal, financier and art collector, the patio was installed with the aid of the New York architectural firm of Brown, Lawford & Forbes; the museum's Associate Research Curator, Olga Raggio; and funds provided by the Blumenthals. Every effort has been made to create an open-air-patio atmosphere—shrubbery, statuary, sun from the glass roof, and an arti-







Photos: Ezra Stoller

ficially lowered temparture almost convince one that this is the real thing. The museum features the 16th-Century patio as the main entrance to the modernistic Thomas J. Watson Library (also designed by Brown, Lawford & Forbes) and as a quiet place for meeting and greeting. Where else can one enter a late-19th-Century museum, walk through an early-16th-Century patio, to read a book in a 20th-Century, glass-faced library?

New Jet-Age Terminal Planned for Newark

NEWARK, N. J. Twelve million cubic yards of land fill is being dumped near Newark Airport in the first step of a $150 million expansion program that will more than double this terminal's passenger handling capacity. To be completed by late 1968 are two new terminals, a new parallel runway, parking space for 12,000 automobiles, an underground fuel distribution system, and new cargo and maintenance facilities. A third terminal will be added later (with room left for a fourth); the present terminal will then be converted into a three-bay hangar.

Newark Airport is one of three air terminals operated by the New York Port Authority (the others: La Guardia and Kennedy International), and preliminary plans by Port Authority architects show each of the new rectangular terminals sprouting lollypop-shaped flight centers from which passengers will enplane and deplane. Each of these flight centers will have passenger waiting rooms for each plane position and will have services such as washrooms, newsstands, and coffee shops, so that once passengers have checked onto a flight they will not have to return to the main terminal areas. When all terminals are completed, by 1971, Newark airport will have 76 plane positions, compared to 26 available today.

Each of the four main terminals will have a split-level arrangement, so that arriving or departing passengers will not have to walk up or down more than half a level except for an escalator ride from the parking lot to the ticketing area, which is located on the upper level.

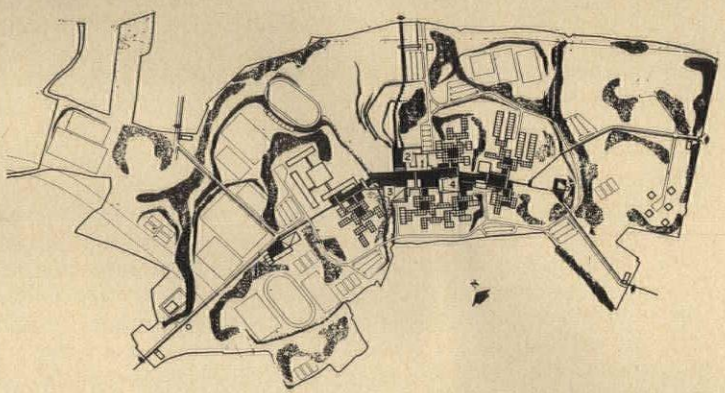


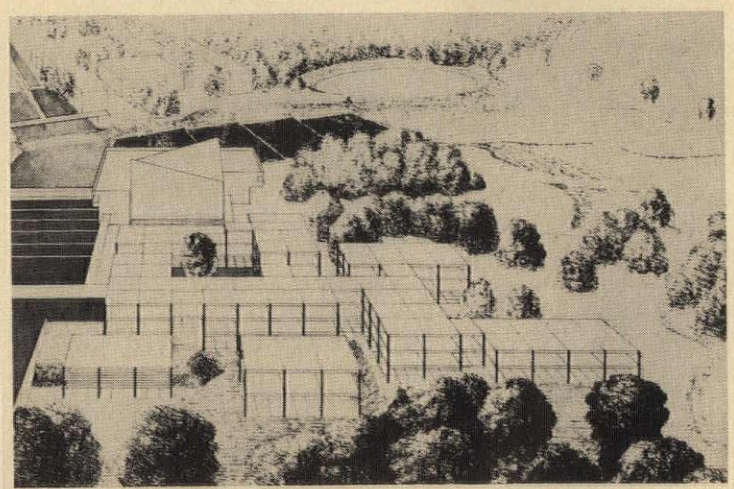


Plans call for 10 miles of access and service roads, allowing each terminal to be approached separately, and all roadways will be elevated so that passengers can enter the terminals directly from the parking lots.

Even with the expansion of the Newark terminal and enlargement of the existing facilities at La Guardia and Kennedy, the Port Authority believes that air traffic in the metropolitan area will be so heavy by 1975 that as many as 200,000 flights a year will have no room to take off or land, and studies are under way to find a location for a fourth airport.

Modular Plan Wins Dublin College Competition





DUBLIN, IRELAND A modular design based on a series of cellular units of 8 x 8 meters has won the international competition for the layout of new buildings and design of a new block for the Faculty of Arts at University College, Dublin. Winning architect is Andrzej Wejchert of Poland (his collaborators were Jan Szpakowicz, Architect - Engineer; Zbigniew Pawlowski, Structural Engineer; and Tadeusz Krupinski). The architecture is of a quite straightforward "international" style that will allow ease and flexibility in making future additions. A significant feature not too common in American colleges is the inclusion of an *aula maxima* (1), or great hall, as the center of the composition (the field house probably takes its place here). This large space will be covered by an interestingly warped-plane roof. The *aula maxima*, administration building (2), library (3), and theater (4) do not use this modular system. The design respects what is said to be some lovely Irish countryside, and provides for a recreation area near the Science and Arts Buildings.

Second-place winners in the competition were Brian Crumlish and Don Sporleder of the faculty of the University of Notre Dame (team members: Carl R. Nelson, Jr.; Tadeusz M. Janowski; and Jim Maeda). Third place was won by a Czech group consisting of Vladimir Machonin, Jiri Albrecht, Jiri Kaderabek, Vera Machoninova, and Karel Prager. The auld sod made it on the fourth prize, which Steph-

enson, Gibney & Associates of Ireland won. A total of 105 entries were received from over 20 countries, after more than 500 architects registered for the competition.

Potomac Valley AIA Awards

SILVER SPRING, MD. Every two years, the Potomac Valley chapter of the Maryland AIA presents awards to local architects. Last month, the chapter announced the winners in its fifth biennial competition. Jurors for the competition were: Karel Yasko, Assistant Commissioner of Design and Construction for the General Services Administration; Baltimore architect Frank Taliaferro; and Charles Burchard, Dean of the College of Architecture at Virginia Polytechnic Institute. Although they gave no awards to churches or schools, feeling the entries in these areas were generally inferior, they presented four first awards and five awards of merit to buildings of five different types. First award winners were: Residence for Mr. and Mrs. Allen Y. Naftalin, Riva, Md., designed by Hugh Newell Jacobsen (judged best in competition); residence for Mr. and Mrs. John Landreth, Brookeville, Md., designed by Harold Lionel Este; Headquarters building for National Sand & Gravel Association and the National Ready Mix Concrete Association (*see photo*) designed by John Henry Sullivan, Jr.; building at 1717 Massachusetts Ave., Washington, D.C., designed by Cooper & Auerbach. Awards of Merit went to Keyes, Lethbridge & Condon for the Wheaton Youth Center in Wheaton, Md.; Keyes, Lethbridge & Condon for Carderock Springs, Potomac, Md.; Faulkner, Kingsbury & Stenhouse for Holy Cross Hospital of Silver Spring, Md.; Cohen, Haft & Associates for Munson Hill Towers, Fairfax, Va.; and Deigert and Yerkes & Associates for National Arboretum Headquarters Building, Washington, D.C.

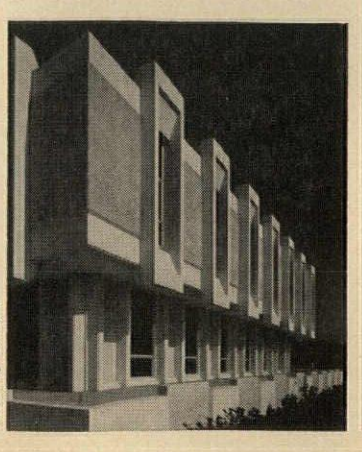


Photo by Damora

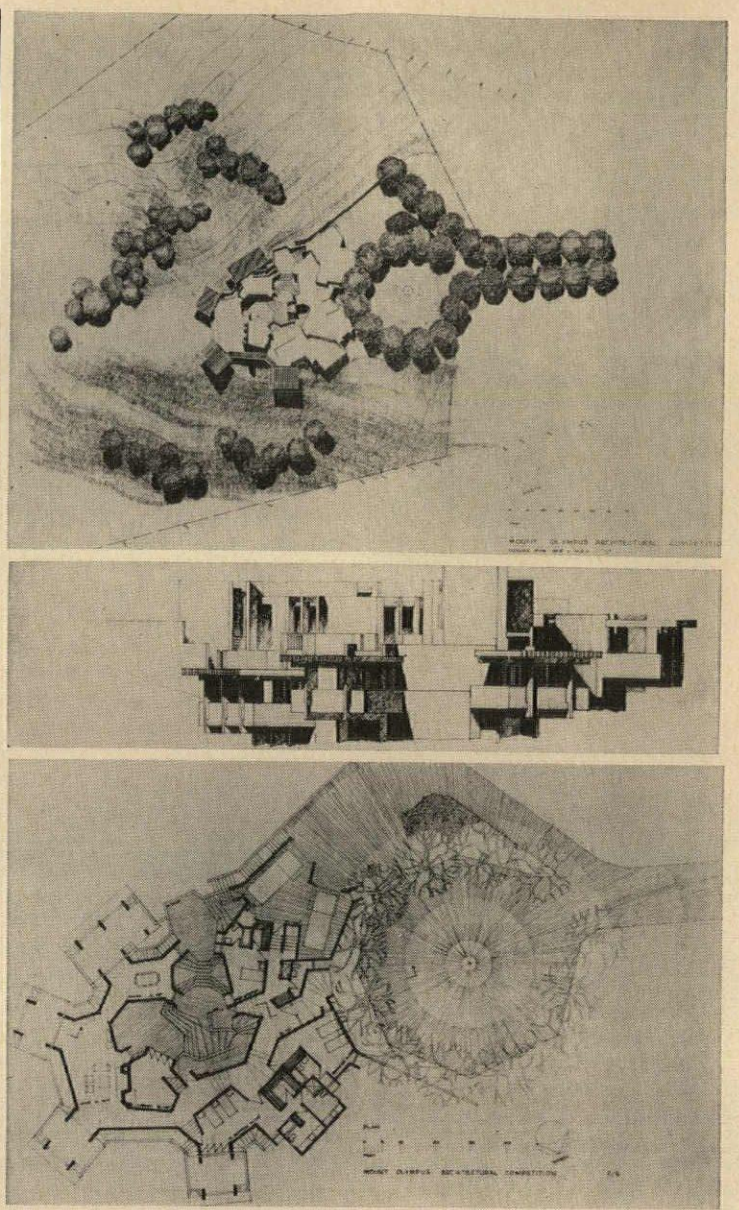
Competition on Olympus

LOS ANGELES, CALIF. Douglas P. Haner, a Seattle, Washington, architect, who now lives in Rome, won a truly Olympian sum of $15,000 in the Mt. Olympus Architectural Competition for his design of a "Moorish" type home. Sponsored by the Mt. Olympus division of the Russ Vincent Realty Co., the competition received more than 2500 entries from 75 countries. From among these, nine jurors picked 30 winners who shared $50,000 in prize money.

Mt. Olympus is a 1600′ hill just off Los Angeles's Hollywood Blvd., between Nichols and Laurel Canyon. Other developers have called it goat land, little remembering that Sunset Boulevard used to be a cow path. Russ Vincent thinks otherwise: "Years ago, my avowed ambition to mold and make these mountains into land that would provide magnificent home sites for thousands was met with ridicule. The task of moving over 12 million cubic yards of earth with equipment then available would have been astronomically expensive, if not physically impossible," remarks Vincent, who plans to put $110 million into transforming Mt. Olympus from goat land into sites for 700 custom homes. Sites will cost up to $500,000.

Entries were judged in three categories, X, Y, & Z. Haner, whose entry was judged best of the three first-prize winners, won in Category Z, an environment suitable for a middle-aged corporation executive and his wife, who have grown children and grandchildren living in other parts of the state. The couple has a large art collection.

Enrique Castenada Tamborrel of Mexico City won in Category X, a design for a doctor and his family. And Julio Villar Marcos of Montevideo, Uruguay, won in Category Y, a home for a television executive and his family. Both Castenada and Marcos were awarded $10,000. Haner's design (shown here), which will cost an estimated $35,000 to build, is of a multilevel, multifaceted building arranged in an organized sprawl around an open court on a hilltop site.

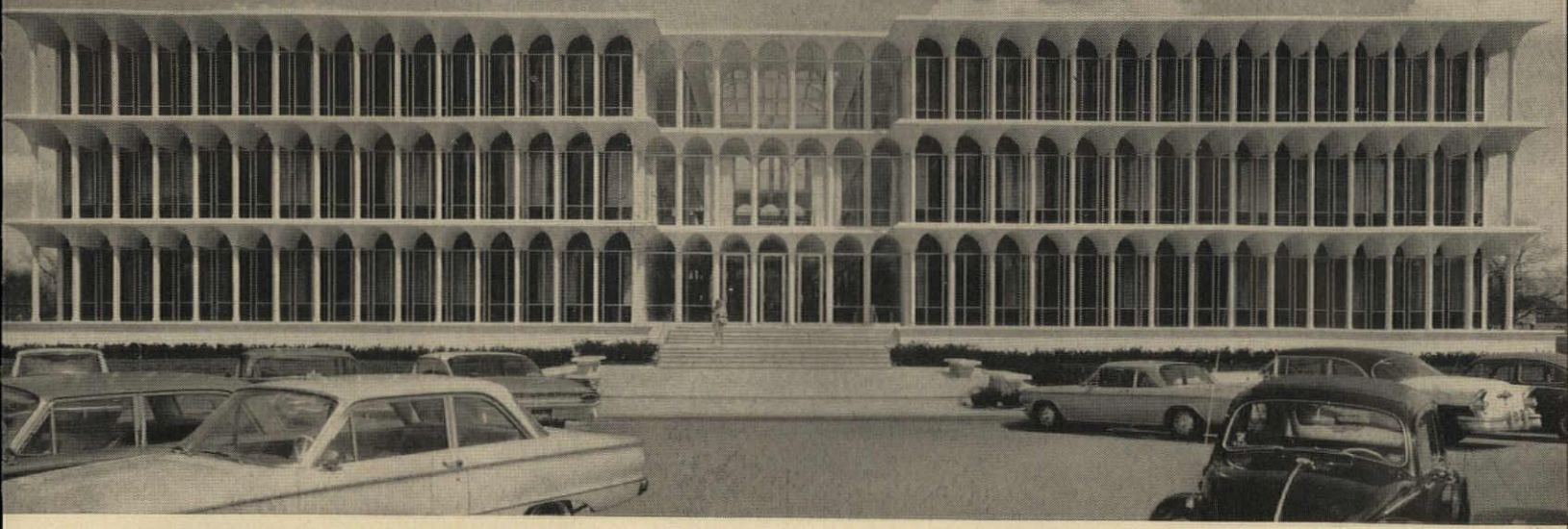


Jurors for the competition were: Vladimir N. Ossipoff, Honolulu, Chairman; Pierre Vago, Secretary General, International Union of Architects, Paris; Paul Thiry, Architect, Seattle; Charles Edward Pratt, Architect, Vancouver; Ramon Corona Martin, Architect, Mexico City; Donna Ludovica Doria, architectural writer and photographer, Rome; Richard J. Neutra, Architect, Los Angeles; Mrs. Norman Chandler, the leading fund raiser for Los Angeles's new Music Center; and Elizabeth Gordon, Editor-in-Chief, *House Beautiful*, New York. Architect George Vernon Russell was professional advisor.

Welton Becket Gives Southern California a Cultural Palace

LOS ANGELES, CALIF. The Pavilion, the first of three planned buildings to be completed in Los Angeles's Music Center, opened last month with a performance by the Los Angeles Philharmonic Orchestra. Los Angelans have long talked of bringing culture to their city, and although the Music Center will no more bring culture to town than a monumental baseball

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Rolled steel forms were used for the 228 vault units, each 5 ft. wide, 2 ft. 9 in. deep, 50 ft. long and weighing 11 tons.



BUTLER UNIVERSITY LIBRARY, Indianapolis, Indiana; Architects: MINORU YAMASAKI & ASSOCIATES, Birmingham, Michigan; Structural Engineers: WORTHINGTON, SKILLING, HELLE & JACKSON, Seattle, Washington; General Contractor: CARL M. GEUPEL CONSTRUCTION CO., Indianapolis, Indiana; Precast, Prestressed Concrete Members: SHUTE CONCRETE PRODUCTS, INC., Richmond, Indiana

Architect Minoru Yamasaki has used prestressed concrete in a highly imaginative way in this Butler University Library. The result is a graceful, almost delicate appearance, but a highly functional, durable and fire-safe structure.

Prestressed concrete was chosen, says Mr. Yamasaki, "in order to express a structural form in a pleasing and direct manner... and to keep the sizes and shapes relatively thin and in good scale."

The structural frame is composed entirely of precast, prestressed members. The vaulted beams are placed on columns so that flat surfaces on top form the floors and curved surfaces underneath form a vaulted ceiling. Extending through to the front of the building, these beams create an attractive scalloped effect. Fluorescent lights are placed in recesses in the base of the beams, keeping the vaults uncluttered.

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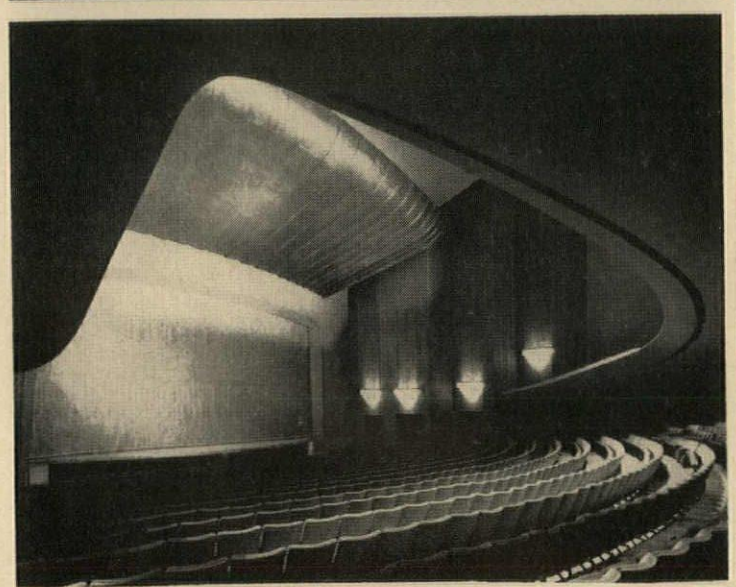
stadium will produce baseball fans or a winning baseball team, the Pavilion will at least give the city of the angels a cultural focal point, supplementing the Hollywood Bowl and Grauman's Chinese Theater. Designed by Welton Becket & Associates, the Pavilion is a triple-threat theater, capable of handling orchestral, operatic, and light operatic performances. This multiple usage stems from a financial stringency imposed at least partly by what seems to be Los Angeles' indifference to culture. Three times, Los Angeles residents went to the polls and voted down a proposal to build a cultural center with the help of public funds. It is now being financed privately.



Besides the Pavilion, the Center will have (by 1966) a 750 - seat, amphitheater - style theater, the Mark Taper Forum, for recitals and experimental theater; and the Center Theater, a 2100-seat theater for legitimate drama, both designed by Welton Becket & Associates. Beneath the Center is parking for 2000 cars.

Becket calls the Pavilion "the most complex architectural problem my firm has ever attempted to solve." Most of this complexity comes from the multiple functions the building is meant to house. A symphony orchestra should have a concert hall with perfect natural acoustics. Grand opera needs a huge stage, lots of storage space for sets, and as large a house as good sight-lines permit. Light opera and ballet require a more intimate theater with amplified sound. To fill all these requirements, Becket made the auditorium a square instead of the traditional narrow rectangle. Seating is continental on the orchestra floor, with no front-to-rear aisles, and about 42″ between rows. Above the orchestra are three main levels of seating, their lines curved to follow the lines of the orchestra. Adjustable acoustics are provided by a gilded, glass-fiber acoustical canopy that extends from the top of the proscenium arch, and that can be adjusted to three positions. According to *New York Times* music critic Harold C. Schonberg, the acoustics at the opening night concert "were clear and well defined . . . But the Pavilion also has the defects of any new hall this size. It represents a so-called modern sound that has sharpness rather than mellowness. Although the sound is evenly diffused throughout the house, it is a hi-fi sort of sound that is somewhat lacking in bass response."





On the exterior, the building is hard to judge in its as yet uncompleted surroundings. It rises from the traffic, which darts past on three sides, much like an elegant subway kiosk from a traffic island. Becket maintains that in the building's design, his office studied classical architectural concepts as a point of departure. And the exterior rows of gently tapered, fluted columns of precast, exposed, quartz-chip concrete do give it a sort of classical "Lincoln Center West" look, in the way columns give a classical look to almost any building. Behind the columns, the building's 330′x252′ facade is of charcoal-black granite and dark glass, contrasting with the white of the roof overhang and the columns. What keeps the Pavilion from being sterile are the graceful curves of two of its sides.

Probably the building's most unfortunate feature is its lobby. Although the three 17′ chandeliers, whose cut glass pendants were made in Germany, fill the 4-story space admirably, their settings try pathetically to upstage them. Each is hung from a point in the ceiling surrounded by a pimple-filled parallelogram, and beneath each on the lobby flooring are circles, filled with the same strange markings. At the back of the lobby, from an opening under the first-floor ceiling, a space that contrasts sharply with the vast openness of the lobby, rises an olive drab carpeted staircase. This opening, reminiscent of the mouth of a cave, is flanked by round structural pillars.

Acoustical Engineers were Paul Veneklasen, Dr. Vern O. Knudsen, and Dr. Robert Leonard. Stage Engineer was William P. Nolan. And Construction Contractor was Peter Kiewit Sons' Co.

Interviewing Aalto



Photo: Courtesy N. Y. Herald-Tribune

Mr. and Mrs. Aalto

Alvar Aalto made two of his infrequent trips to this country recently, the *most* recent one (last month) to attend the opening of his Edgar J. Kaufmann Conference Rooms (donated by The Edgar Kaufmann Foundation) in the new Institute of International Education building facing the United Nations in New York. The evening after the opening, he received an honorary degree of Doctor of Humane Letters from Columbia University. The Aalto rooms will be published in detail in the FEBRUARY 1965 P/A.

On a previous trip, when the great Finn came to New York to check on the progress of the conference rooms, P/A was privileged to tour the spaces with him and hear his views on architecture generally and the IIT project specifically.

Though he is known to avoid general discussions of architectural aesthetics, we tried a few generally aesthetic questions, with these responses:

"People always ask, 'Why?'. I do not know why." He smiled and shrugged. "People always ask about the symbolism. I am not very good at symbolism."

P/A observed that, more and more, Finland is being recognized as the real leader of Scandinavian design. Although Aalto appeared unimpressed by being told something he had known for years, he became voluble when we asked him why this is so.

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"We have some things that are not so good," he said. "But one thing may be true. That is, that our industry is like Canada's—it is all forest. That is our important production. But for other things, what should a country like ours do?

"These lamps, for instance, are made in a factory that employs 70 men. They have worked for me, and only for me, since 1927.



Photo: Courtesy Columbia University

Aalto at Columbia

"It is good that you work with the elements of your country—the wood shop, the metal shop. That gives you balance. So I keep the factory doing for me all sorts of crazy things that I do not even know how to use yet. But some day . . . these lamps took me half a year to work out."

We asked how he felt, 17 years later, about his only other existing work in this country, the Baker Dormitory at MIT (his first, the well-remembered Finnish Pavilion at the 1939 New York World's Fair, is long since gone). "It is not finished yet," he replied. They never built the roof garden, which he considers an integral part of his design.

"But MIT said, 'In Europe, you build your cathedrals in 500 years; why cannot we take 20 years to complete a dormitory?' "

Aalto told P/A about his current work. Between U.S. trips, he visited Paris, where he is building a swimming pool and designing a new art gallery for Louis Carré. "He never stops building," Aalto remarked with a subdued twinkle. A library is being completed near the city hall and church in the civic center of Seinäjoki, Finland, and to follow are an administrative building for the state, a theater, a social hall for the church, and a small university. The teachers' college at Jyräskylä is now getting a student union building and will get a new physical education facility in the future. The concert hall in Helsinki is in the foundation stage, and an opera house for Essen, Germany, is in working drawings.

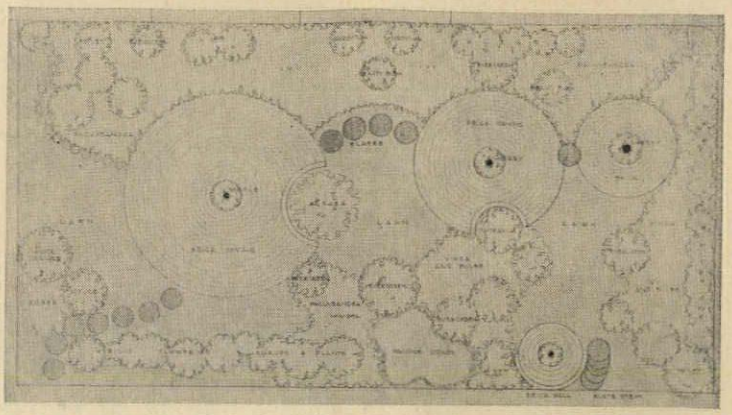
Aalto and Edgar Kaufmann, Jr., discussed their first meeting on the conference rooms. "When I told him about the project," Kaufmann related, "Aalto said, 'Oh you mean a room within a shell—such as the room Frank Lloyd Wright did for your father.' I thought that good of him to remember." (Reference was to the office Wright designed for Kaufmann, Senior, in his Pittsburgh store.)

Just then, Michael Harris, partner and project director of Harrison & Abramovitz, architects of the building, entered to see whether Aalto was pleased with the progress of the room.

"Very pleased," he said. "Now about those plant boxes," he continued, leading Harris onto the terrace and away from our receptive ear.

Pocket Parks Prod Progress

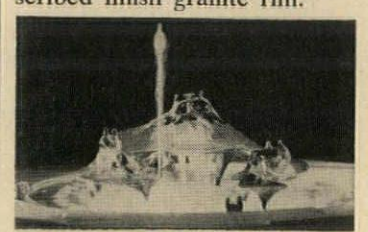
PHILADELPHIA, PA. Why not turn tax-delinquent land into neighborhood parks? The City of Philadelphia could think of no good reason why not, and it could think of some compelling ones *why* such land, otherwise usually deserted and almost always decaying, should be put to good use. For one thing, if the land were bought by the city, it would provide a sort of land-bank for urban renewal projects. For another, it would, in the meantime, keep these sites from being eyesores, detracting from the desirability and even sanitation of their areas. What Philadelphia did was create what it calls a Land Utilization Program under its Department of Licenses and Inspections. Headed by Eve Asner, a young woman with a background in both social work and civil service, the program takes eyesore lots bought by the city and turns them over to responsible neighborhood groups, churches, or even individuals who will fix them up and keep them fixed. Miss Asner, who has developed a sharp eye for such things as unwanted piles of brick, provides some materials, and her group will do some preliminary work, such as bulldozing. It will also find and provide volunteer architectual help with the aid of the local Junior Chamber of Commerce. The rest is done by persons in the neighborhood, who do the construction work. Some parks are what Philadelphia calls "tot lots," where the emphasis is on children's equipment — sand piles, swings, slides. Some have recreational facilities such as basketball or horseshoes; and some (*see above*) are just quiet green areas with benches in the midst of what is otherwise dirt and noise. One of Miss Asner's largest problems is to educate neighborhoods to use and care for the parks once they are developed. That this is no easy task is attested to by high Cyclone fences that surround (and mar) many of these pocket parks. But as a neighborhood begins to take pride in its park, it begins to take pride also in its housing, and houses near these projects soon begin to look more spritely as occupants wash windows and steps, and even paint shutters. Currently, the Land Utilization Program has about 40 projects underway, and a land reserve big enough to provide almost 600 more. What the program needs now is more volunteer architects—and time.



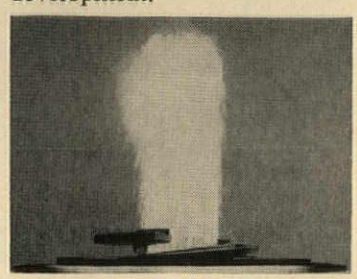
Philadelphia Fountain Competition

PHILADELPHIA, PA. Perhaps more than any city in the U. S., Philadelphia is a city of fountains. Most of the notable ones are along the Benjamin Franklin Parkway, and now the Fairmont Park Art Association plans to add another. If built, it will be at the southeastern end of the parkway where the city is creating a plaza and an underground garage. The fountain was the winning entry in a competition, sponsored by the Fairmont Park Art Association, which drew 194 entries. First prize of $12,500 and a jury recommendation for a construction supervision contract went to Philadelphia architects Stonorov & Haws. Oscar Stonorov & Jorio Vivarelli were collaborating sculptors on the entry which was selected best in show by a three-to-two vote of the five-man jury.

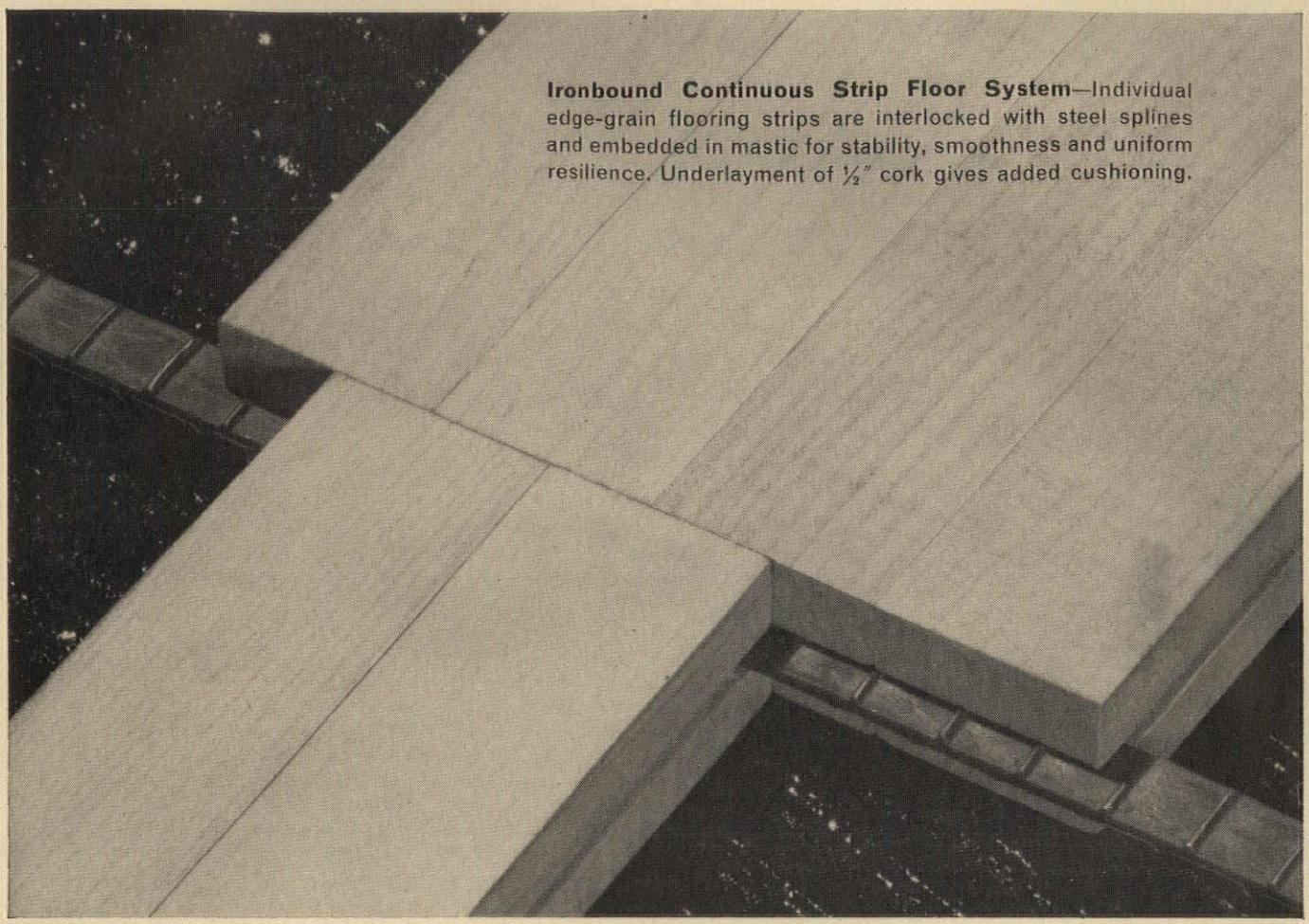
The problem put forth in the competition was to design a fountain that could be constructed with its appurtenances for no more than $500,000. It was to be as striking in winter as in summer, by night as by day, and as serenely pleasant in a high, gusty wind as in a calm. Whatever architecture or sculpture was proposed was to fit within a structural concrete circular basin and the prescribed finish granite rim.



According to the judges, the winning entry has qualities of joy and affirmation, and the most promising possibilities of development.



Second prize, $7500, went to Abraham W. Geller & Ray-



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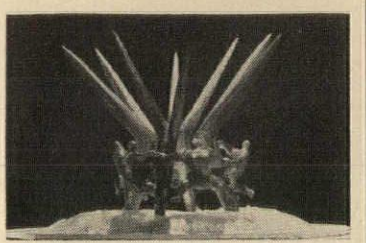
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mond J. Abraham, Architects, Henry Gorlin, Structural Engineer, and Richard De Cew, Fountain Consultant, all of New York City. The jury thought that without water action in the winter months the metal sculpture, two interacting spiral forms, would be uninteresting.



Third prize, $5000, went to Louis Sauer, Architect, Philadelphia, and Robert Ranieri, Sculptor, New York City.



Fourth prize, $3000, was awarded to Jack A. Thalheimer, Architect, Philadelphia, and Nathan Rapoport, Sculptor, New York City.

Fifth prize, $2000, was won by Ruben Nakian, but the prize may be withheld because Nakian, a sculptor, entered without a collaborating architect as specified by the competition rules. Five honorable mentions of $1000 were also awarded.

Jurors for the competition were I.M. Pei and Charles R. Colbert, Architects, Jacques Lipchitz and Theodore Roszak, Sculptors, and Philip Price, president of the Fairmont Park Art Association. Norman N. Rice, Architect, was the professional advisor.

Significantly, the competition resulted in a change in the AIA Code of Competitions for Class A Competitions. Because of the size of the competition (194 entries, sent at an average estimated cost of $1000), the sponsor agreed to award all 10 prizes on the basis of best in show but gave the jury the right to recommend or not recommend the first-prize winner for construction. Paul Rudolph, originally one of the jurors, disagreed with this policy, and withdrew. Late last summer, the Board of Directors of the Pennsylvania Society of Architects adopted a resolution favoring the policy and sent it to the national AIA. Agreeing with the resolution, the AIA adopted it for Class A competitions.

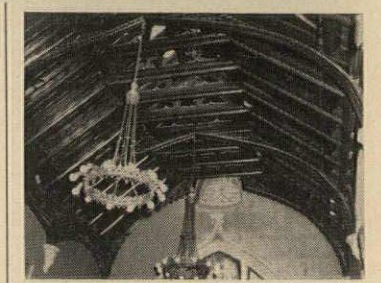
Gould Gothic To Be Preserved

TARRYTOWN, N. Y. Lyndhurst, Jay Gould's mansion overlooking the Hudson River, is now in the hands of the National Trust for Historic Preservation, a nonprofit organization that maintains eight other historic houses throughout the U. S. Its setting here, not far from Washington Irving's birthplace, would be almost completely rural were it not for the railroad tracks that run along the river below the house, and the smokestacks of a General Motors plant, visible through the trees to the north. Gould would have relished both these industrial intrusions and probably would have tried to take them over. Indeed, it was in railroading that he made his first fortune and garnered his notoriety as one of our gaudiest 19th-Century wheelers and dealers. Today, the house has an air of decay, but plans are under way for its renovation. When Gould's youngest daughter, Anna, Duchess of Talleyrand-Perigord, died in 1961 at the age of 86, she bequeathed the house and its 445 acres to the National Trust. The Trust plans to maintain Lyndhurst with the proceeds from the sale of 364 of these acres, despite protests from Tarrytown's city government, which worries more about Gould's social image as a "robber baron" than about the architectural significance of his home.

Lyndhurst, or what was to become Lyndhurst, was designed by Alexander Jackson Davis in 1838 as a country place for William Paulding, a congressman from New York and later mayor of New York City. Davis, a partner of Ithiel Town, commissioned Richard H. Byrnes, a talented Irish cabinetmaker and woodcarver, to execute the elaborate interior and exterior architectural details and the furniture. The exterior was inspired by Lowther Castle in England. In 1864, George Merritt bought



the house, named it Lyndhurst, and called in Davis and Byrnes to enlarge it. They added a tower, making an angle buttress into an angle turret; they doubled the number of bays and oriels, and added another story, carefully preserving the original "medieval" character. They also added dining-room furniture, bedroom suites, more carved bosses, marble mantals and built-in-niches for sculpture and art objects. Since then, the house has remained substantially the same, although the Goulds added a host of appurtenances such as carpets, tapestries, porcelains, and sculptures. It has 16 rooms with baths, kitchens, and servants' rooms. Perhaps



most notable are the long upstairs gallery, whose ribbed ceiling is shown above, the hexagonal music room just off the entrance, and the floor-through dining room with its great marble fireplace. The National Trust for Historic Preservation plans to restore the house, then open it to the public sometime this summer.

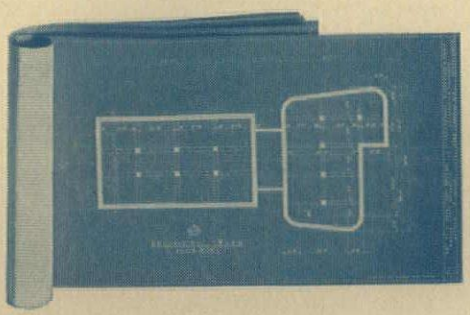
Johnson, Breuer Build for NYU

NEW YORK, N. Y. The Ford Foundation has promised New York University $25 million if the University will raise a matching $75 million. Much of the money (an estimated $66.7 million), to be raised in a three-year campaign, is earmarked for architecture. NYU plans to use it to build four new buildings and remodel at least four others. With its more than 41,000 students, NYU has two campuses in New York City, one at historic Washington Square (p. 49, DECEMBER 1964 P/A), and the other at University Heights in the Bronx.

Preliminary plans, announced recently by the University, call for Philip Johnson and Richard Foster, Architects, to design a $17.5 million library and study center and an education building on the square. These will be similar in design to NYU's existing Main Building and Commerce Building (also on the square), which Johnson and Foster will redesign. Most striking feature of their proposal is a glass canopy stretching between the top of the Main Building and that of the Commerce Building, 10 stories above what is now a street on the east side of the square, but which will become a landscaped



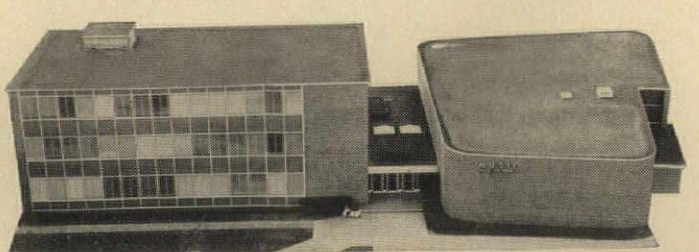
"galleria." The architects hope to give the Washington Square campus an identity, something it now lacks, while maintaining and even enhancing the beauty of the square. "Our primary aim," Johnson said, "is preservation of the park, instead of building individual monuments to architects or the University." NYU President Dr. James M. Hester is quoted as saying that buildings of the same height



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DOW

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(supposedly 10 stories) enclosing the square will make it more complete, more dramatic.

Uptown, for University Heights, Marcel Breuer has designed a technology building and a life science building.

According to Hester, the plans will be carried out as fast as funds permit. He hopes it can be completed within five years.

Student Conference South of the Border

BUENOS AIRES, ARGENTINA South America, where many governments ride a wave of revolutionary mandate, has some traditionally disquieting political and social problems. Many governmental and nongovernmental groups are trying to pour oil on these troubled waters. Among the former is President Kennedy's Alliance for Progress; included in the latter is the Congress of Pan American Students of Architecture, which held its fifth meeting in Buenos Aires recently. Participating (along with 150 architectural students from Mexico and all South American countries except Chile) were six student delegates from the U.S.: James Diaz, Harvard; Anne Timmons, Tulane University; John Colby, Syracuse University; Gilbert Labrie, California Polytechnical College; Thomas Moran, University of Detroit; and James M. Hamill, Iowa State. In a week of sessions, the conference, sponsored by the Oficina Panamericana Relacionadora de Estudiantes de Arquitectura, discussed methods of housing Latin America's burgeoning population and ways of educating architects to do it properly. Hamill told P/A that the participants noted that architecture should be in tune with the needs of the people. It should provide humanistic solutions instead of "sculptural" ones. And it should make full use of prefabrication and other advanced construction techniques. To meet Latin America's problems, the architectural student should study sociology and urban planning as well as design. And, finally, the conference members pointed out that a change in the political, economic, and social structure of most Latin American countries was necessary before architecture and planning can truly succeed. How to effect these changes? One way is through closer cooperation among all American nations and their architects.

As if to highlight the problems discussed while the conference was in session, some 30,000 students demonstrated in Buenos Aires, demanding more government funds for universities and fewer military weapons and plans.



Ville Marie's Final Building

MONTREAL, CANADA. Construction has been begun on the final building in I.M. Pei's Place Ville Marie. (For the story of Place Ville Marie architectural planning, see p. 123 – 135, FEBRUARY 1960 P/A). Named for its principal tenant, the IBM building will stand at the west end of the plaza. The foundation was laid at the same time the original Place Ville Marie construction was done, so the 14-story building should be ready by the spring of 1966. Although Pei's façades of vertically-accented, precast aggregate concrete frames—into which tinted gray glass panels are set—harmonize with one another, they may tend to stand out starkly against the older buildings that fringe the square, destroying its open, well-defined integrity.

HHFA Sees Stable '65 Housing Market

WASHINGTON, D.C. Total nonfarm housing starts in 1965 will be close to 1,550,000 units, about the same as in 1964, according to Henry B. Schechter, director of the Housing and Home Finance Agency's Division of Housing Analysis. Of this total, 525,000 will be multifamily units, a drop of almost 50,000 from 1964, but the over-all total will be maintained by a boost in single-family housing starts, expected to be 1,025,000, up 50,000 from 1964. An addition of 50,000 public and farm housing units will bring 1965 housing starts up to 1,600,000. Schechter maintains that the 5 per cent increase in private nonfarm single-family housing is expected for four reasons: (1) sales unit vacancies are low (1.4 per cent); (2) inventory of unsold, completed homes has remained stable; (3) sales of new units are rising; and (4) higher mortgage limits for FHA-insured loans, authorized in 1964, will reduce down payments on higher-priced homes. These factors, plus a generally favorable economic outlook and higher after-tax incomes, are expected to keep housing starts strong.

Schechter also announced results of a Bureau of the Census-HHFA survey based on 1963, which showed that 62 per cent of one-family starts that year were built for sale. Median size of homes that year was 1365 sq ft and median cost $18,000. In the North Central region, median price was slightly less than $18,000; in the Northeast, $20,000; in the South, $16,000; and in the West, $18,000.

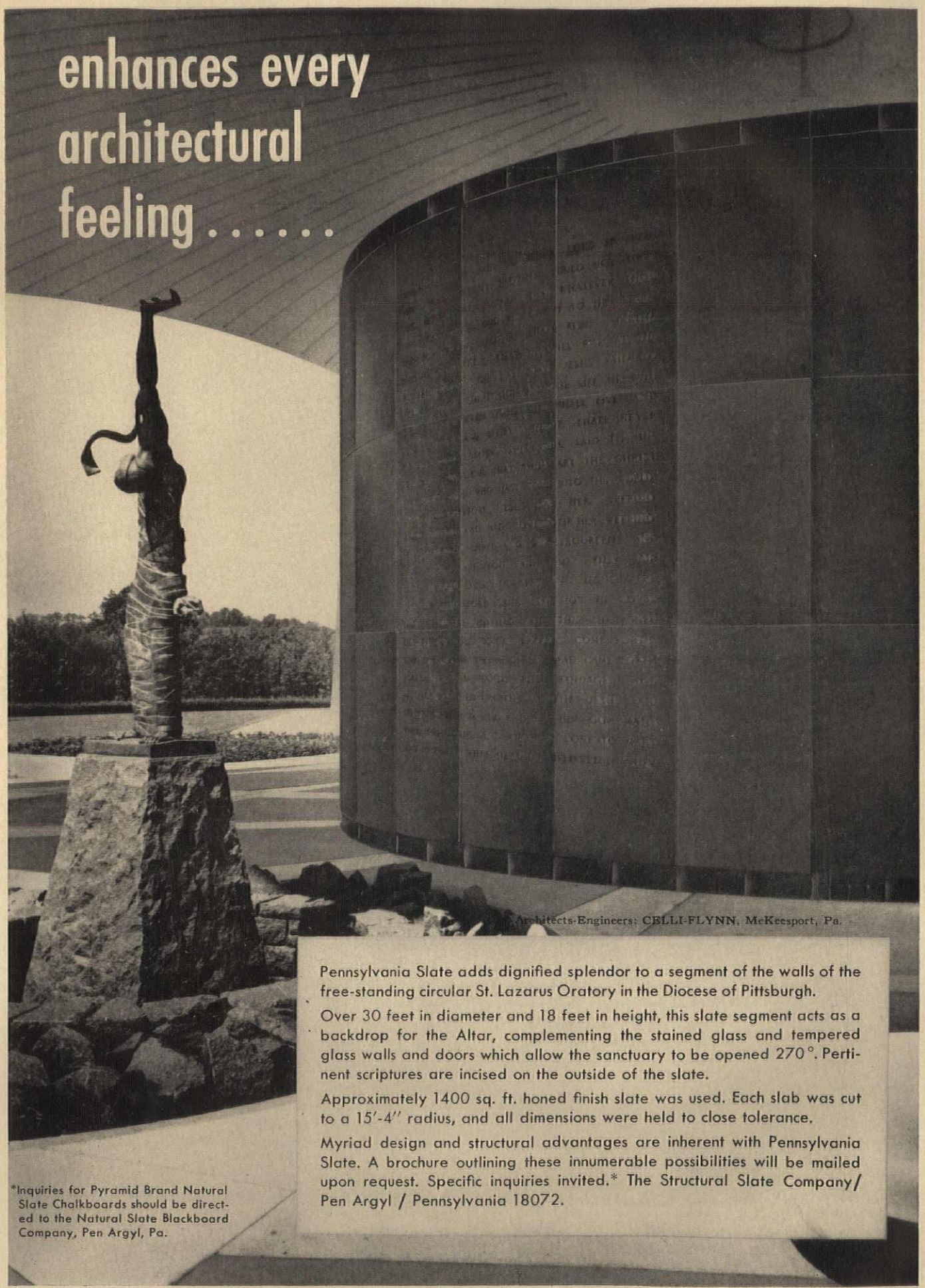
Schools

A series of three one-week seminars will be held this August at the Pennsylvania State University under the chairmanship of the Department of Architectural Engineering. Subjects to be discussed are "Shear and Bond in Reinforced Concrete Structure," "Acoustics and Noise Control in Buildings," and "Cost Saving Practices in Building." Additional information may be obtained from Bryce C. Gray, Conference Coordinator, Conference Center, The Pennsylvania State University, University Park, Pa. . . . Two $3000 graduate fellowships for hospital design have been offered by the American Hospital Association and the AIA. Applications may be made prior to February 1 at the American Hospital Association, 840 North Lake Shore Drive, Chicago, Ill. . . . Cornell University has announced a number of grants for graduate study in Urban Design, History of Architecture, and Architectural Structures for the 1965-66 academic year. Forms should be filled before February 1 and sent to Dean Burnham Kelly, College of Architecture, Cornell University, Ithaca, New York . . . Rensselaer Polytechnic Institute is offering a summer institute on urban planning aimed at providing professional level study in urban planning, transportation, architecture, and related fields. The six-week summer course was made possible by a grant from the National Science Foundation. . . . Architectural, city planning, engineering, applied mathematics, and applied physics faculty members will have a choice of five Institutes on Nuclear Defense Design to attend this summer. Information may be obtained from the Assistant Executive Secretary, American Society for Engineering Education, University of Illinois, 1201 W. California, Urbana, Ill.

Personalities

SHAW METZ & ASSOCIATES, Architects and Engineers, have received the Chicago Building Congress' 1964 Merit Award . . . ALBERT KAHN ASSOCIATED ARCHITECTS AND ENGINEERS were cited by the International Relations Committee of the Association of Collegiate Schools of Architecture for participation in the 1963 and 1964 Student Exchange Programs sponsored by ACSA . . . ROBERT C. PALMER, president of The R.C. Mahon Company, has been re-elected president and a director of the American Institute of Steel Construction . . . Building Research Institute announces new Board members: J.W. GRIFFITH, GUSTAVE R. KEANE, W.E. KEMP, ROBERT B. TAYLOR. Re-elected to the Board were LEON CHATELAIN, JR., PERRY PRENTICE, D. KENNETH SARGENT, R.J. SHORT. Officers of the Institute were also announced. ROBERT W. CUTLER, General Partner of Skidmore, Owings & Merrill, will remain president and chairman of the Executive Committee. JACK GASTON, OTTO NELSON, MILTON C. COON, JR., and WILLIAM S. HASWELL also

enhances every architectural feeling.....



Architects-Engineers: CELLI-FLYNN, McKeesport, Pa.

Pennsylvania Slate adds dignified splendor to a segment of the walls of the free-standing circular St. Lazarus Oratory in the Diocese of Pittsburgh.

Over 30 feet in diameter and 18 feet in height, this slate segment acts as a backdrop for the Altar, complementing the stained glass and tempered glass walls and doors which allow the sanctuary to be opened 270°. Pertinent scriptures are incised on the outside of the slate.

Approximately 1400 sq. ft. honed finish slate was used. Each slab was cut to a 15'-4" radius, and all dimensions were held to close tolerance.

Myriad design and structural advantages are inherent with Pennsylvania Slate. A brochure outlining these innumerable possibilities will be mailed upon request. Specific inquiries invited.* The Structural Slate Company/ Pen Argyl / Pennsylvania 18072.

*Inquiries for Pyramid Brand Natural Slate Chalkboards should be directed to the Natural Slate Blackboard Company, Pen Argyl, Pa.

For more information, turn to Reader Service card, circle No. 383

were named as officers . . . The New York Society of Architects named H.I. FELDMAN, Architect, winner of the Sidney L. Strauss Memorial Award . . . New member, board of trustees of the American Academy in Rome is EDMUND N. BACON, executive director of the Philadelphia City Planning Commission . . . WILLIAM W. CAUDILL, chairman of the Department of Architecture at Rice University, has received the 1964 Engineering Hall of Fame award from the Oklahoma State University . . . The Howard S. Cullman Distinguished Service Medal, the Port of New York Authority's highest award, went to OTHMAR H. AMMANN, "The master bridge builder of our time who has proven that functional structures can be lifted above the prosaic into the realm of the beautiful and the magnificent" . . . ALLEN MACOMBER, a partner in the firm of Faragher and Macomber, Rochester, New York, will succeed Simeon Heller as president of the New York State Association of Architects, Inc. . . . LEWIS MUMFORD was re-elected President of the American Academy of Arts and Letters.

Calendar

The annual Committee Week and Spring Meeting of the American Society for Testing and Materials will be held February 8-12 in the Statler Hilton Hotel, Cleveland, Ohio. Everyone interested is cordially invited . . . National Engineers' Week, February 21-27, will have as its theme "Engineering . . . For Human Needs" . . . The American Institute of Consulting Engineers will sponsor the Industrial, Institutional and Commercial (IIC) Building Conference March 8-11 at Cobo Hall, Detroit, Mich. Those who wish information and registration forms should write Clapp & Poliak, Inc., 341 Madison Avenue, New York, N. Y. . . . The American Welding Society will hold its 46th Annual Meeting and Welding Exposition April 26-30, 1965 in Chicago, Ill. For further details write Information Center, American Welding Society, 345 E. 47 St., New York, N. Y. . . . The second National Convention of Consulting Engineers Council will be held May 19-21 at the Chase Park-Plaza Hotel, St. Louis, Mo. . . . Yosemite National Park will be the site of the 20th annual convention of the California Council, AIA, from October 6 through 10.

Obituaries

JOHN MULLER, partner in the New York architectural firm of Rossiter & Muller, died at the age of 81 in his home in Bridgehampton, Long Island.

Competitions

The Regents of the University of California have authorized a competition to select an architect for the proposed new University Arts Center in Berkeley. Forms and information may be obtained from Eldridge Spencer, Professional Adviser for the University Arts Center Competition, 251 Kearny Street, San Francisco, Calif. The deadline is January 30, 1965 . . . The City Club of New York is planning its 1965 Albert S. Bard Awards for Excellence in Architecture. The competition will again be devoted to civic architecture, but will be enlarged to include work commissioned in New York by the State and Federal governments . . . Sponsorship of a 1965 Architectural Awards Program, open to all registered architects in the United States, has been announced by the Dow Chemical Company. Participants may submit as many entries as they desire. Single-residence units or house designs are not eligible. Full information may be obtained from any Dow sales office or by writing to Lewis Redstone, 10811 Puritan Ave., Detroit, Mich. . . . A lighting modernization contest sponsored by *Lighting Magazine* is open to anyone in the lighting industry. The lighting installation described in the entry must have been completed and put into service after July 1, 1963; it must have replaced an inadequate installation. Further information may be obtained from the Contest Editor, *Lighting Magazine*, 1760 Peachtree Rd., NW, Atlanta, Ga. Contest closes March 31, 1965.

WASHINGTON/FINANCIAL NEWS

BY E.E. HALMOS, JR.

The heavy emphasis in the new Congress and on the Administration's part on broad-gage "social" programs—urban renewal, transit, and other metropolitan problems, education, conservation of natural resources, adjustment to the changes forced by increasing technology—will mean more business for the construction industry. It should also mean a greater role in over-all planning for architects, though that's not nearly so certain.

As you have seen in the President's series of annual messages to the 89th Congress (State of the Union, Economic Report, Budget Message), there's little doubt that legislation concerning economic and social matters will get through rather quickly — assuming that the world situation remains fairly stable. President Johnson has increased party majorities in both houses of Congress, and will also benefit from the "honeymoon" period usually enjoyed by a newly-elected President.

Most of the programs involve billions of dollars in basic construction work: new schools, offices, and laboratories for training scientists and technicians; new facilities for transportation, water supply, sewage disposal; redevelopment of urban centers to return life to moribund metropolises; reconstruction of city cores to accomodate new conditions; new highway systems, and so on.

What's lacking, at the moment, is any evidence that architects and civil engineers have moved to get in "on the ground floor" of the planning that will direct all this work, as their scientific bretheren (sociologists, space technologists, medical men and others —including a goodly sprinkling of university and college professors) have already started to do.

A half dozen committees of scientists of one sort or another have already been formed—some under the auspices of Congress and the National Academy of Sciences—to look into aspects of some of the social programs being formulated, and to suggest directions for future scientific and technological progress.

Architects and engineers are virtually unrepresented in these scientific groups, although they are the ones who must implement many aspects of the programs suggested, and although their knowledge of such matters as city planning would seem to be invaluable.

A sidelight on this entire problem was the President's comment that the nation must pay more attention to beautification of its vast highway network — a point long stressed by individual architects.

Mr. Chairman!

The Congress that assembled in Washington on January 4 contained many new faces—some 50 in the House, several in the Senate—but there were comparatively few unscheduled changes at power-points which count most: the committee chairmanships.

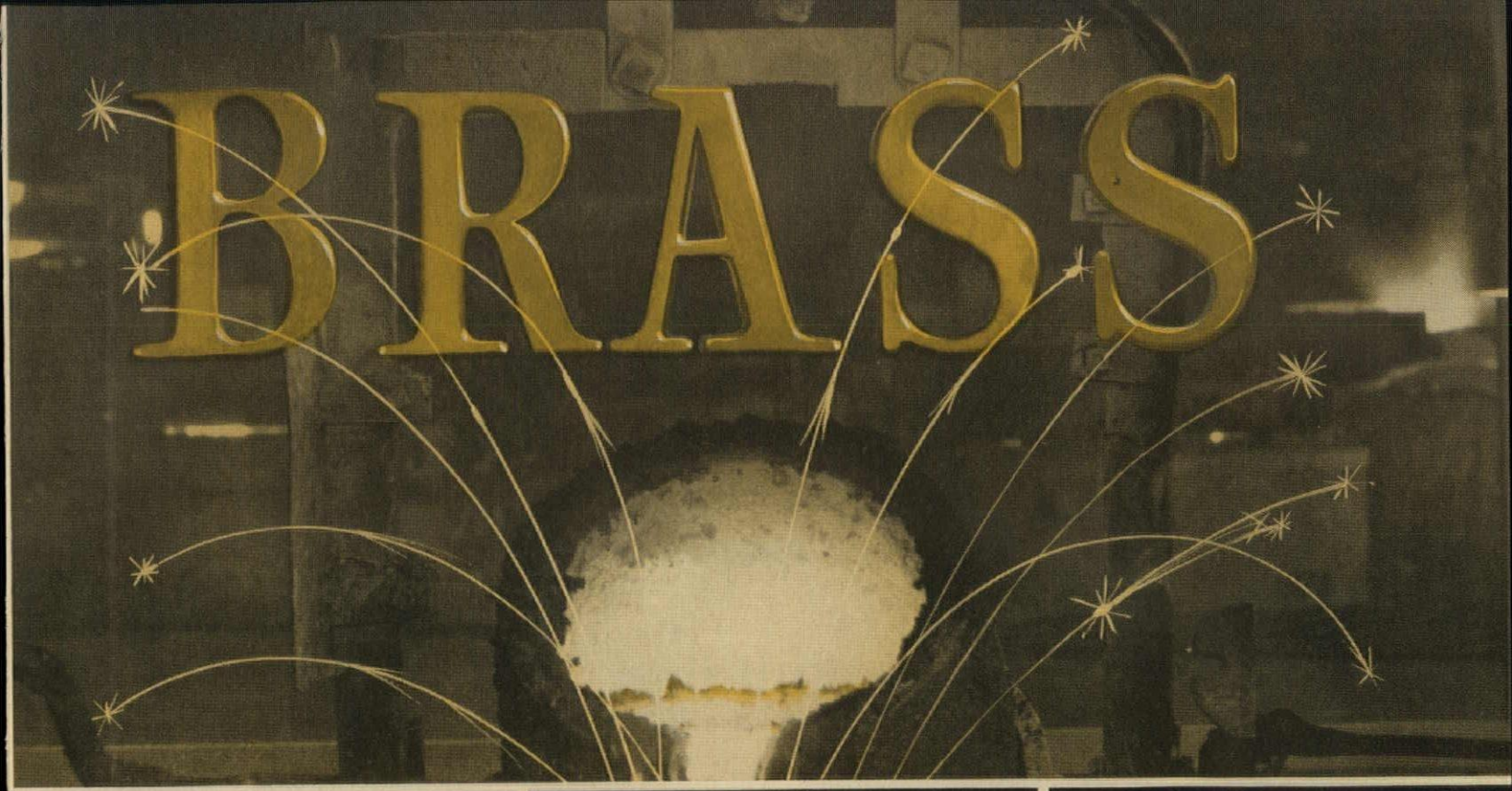
With Democrats retaining overwhelming control of both houses, almost all committee chairs remained in the same hands, or were handed along to trusted lieutenants—as happened with the retirement of Carl Vinson of Georgia (House Military Affairs Committee) and Clarence Cannon of Missouri (Appropriations).

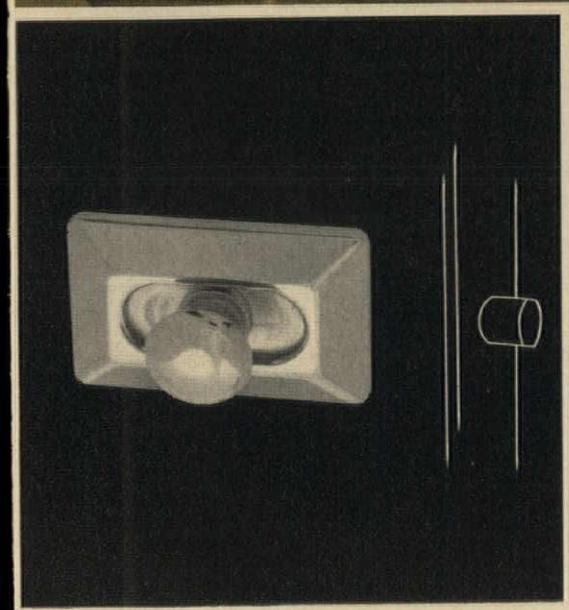
Most significant change of command for the construction industry, perhaps, was the succession of Rep. George Fallon (D., Md.) to the chair of the powerful Public Works Committee of the House—in place of New York's aging Rep. Buckley, who was not re-elected. Fallon's major interest has been in highways and urban planning (he was a co-author of the 1956 Highway Act), and he has taken a strong interest in the need for the thorough training of more architects and engineers.

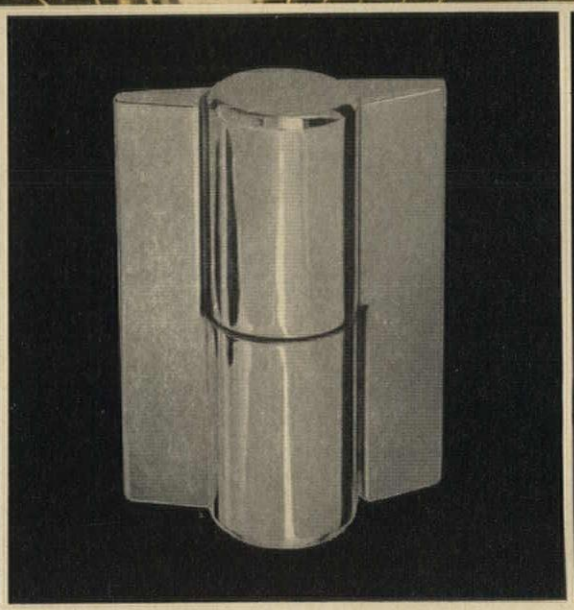
Labor Demands

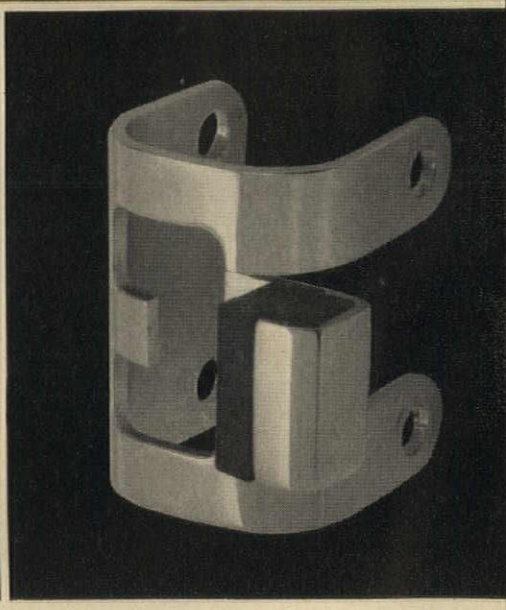
Depending in part on whether Congress is willing to listen to arguments it has refused to consider in the past, there could be labor problems for the Administration this year.

Labor leaders have already put Washington on notice that they expect better treatment









Standard equipment! Solid Brass Hardware

Another long-life feature for Weis Toilet Compartments: *solid brass hardware.* Solid brass plus the added protection and beauty of brilliant chromium plate. The latch, which continues to feature lift-free emergency access, is now recessed within the door. The stainless steel bolt automatically retracts if the door is slammed against the new wrap-around keeper and rubber tipped bumper. Handsome surface mounted hinges, proven through long service, give either 180° outswing or inswing action. *Solid*, these compartments by Weis with solid brass hardware.

Write for Catalog No. 36 See Weis in Sweet's

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WEIS

HENRY WEIS MFG. CO., ELKHART, INDIANA

this year—particularly in their campaign against hated "right to work" laws, which are permitted under the Taft-Hartley Act if enacted by state legislatures, and which bar compulsory union membership. Other objectives: a $2-per-hour minimum wage law (upping the recently enacted $1.25 minimum), more money for construction, aid to local communities, medicare, and expansion of social security coverage.

Financial

The time for the yearly look into the crystal ball of economics had arrived for the construction industry—and all the standard indicators seem to call for a further rise in the level of business.

There are a couple of unknowns and a couple of "maybe's," however, so economists are not agreed on what will happen.

The U.S. Department of Commerce, for one, is optimistic. Its annual estimate calls for a 1965 volume (exclusive of maintenance and repair) of about $68.2 billion, which would be a 3 per cent increase over estimates of $66-odd billion for 1964. Of the total forecast, about $47.4 billion would be accounted for by private construction, the remaining $20.8 billion by public works.

A $68 billion total would be another all-time high.

Joining in the optimistic predictions (1965 would be the fourth consecutive year of steady uptrend), were the Associated General Contractors (whose thinking was along the same lines as Commerce), and the National Association of Home Builders.

On the basis of a 35-city survey, in fact, NAHB's Builder's Economic Council thinks home construction for 1965 will total about 1.525 million units. That would be about the same level expected when final figures are in for 1964, despite a steady decline in the home building rate over the past several months. Homebuilders acknowledged there would be a slight decline in multifamily housing construction in large metropolitan areas, but thought that town houses and similar work would increase in suburban areas, with single-family home production remaining at about the present rate of 1,000,000 units.

But some economists were pointing out that the predicted increase in dollar volume doesn't necessarily mean an increase in actual construction activity. Instead, it may indicate only that the industry will hold its own—the extra volume being a reflection of factors such as increasing materials and labor costs.

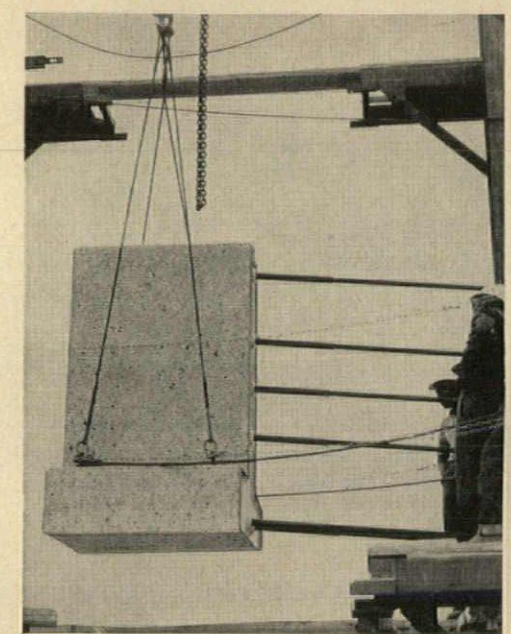
One of the big unknowns for the construction industry—which depends so heavily on bank financing of projects—is the eventual effect of an increase in the rediscount rate, recently put into effect for member bank borrowings in the Federal Reserve system. The "Fed" jumped its rates from 3½ to 4 per cent, in a move to halt the outflow of U.S. capital to Europe.

But the net effect, economists believe, will be to raise interest charges by commercial banks from the present 4½ to 5 per cent. Many banks, say the experts, are already "loaned up" and are borrowing from the Fed to finance new loans; thus their rates will have to be increased to reflect the changes.

In turn, the "price" of money available for financing construction could rise, and money could become tight after an almost year-long period of relative ease. Such a development could seriously slow down new construction starts.

As if to accentuate the notes of caution, statistics for recent months showed some rises in construction costs, and housing totals for October were recorded at an adjusted annual rate of 1.6 million units—up 9 per cent over September, but 14 per cent below October a year ago.

Stressteel Bars Tie Together 14 Story Building



A precast segment being threaded into position over STRESSTEEL Bars to form the bottom chord of the Vierendeel truss.

Owner: North Carolina Mutual Life Insurance Co., Durham
Architects: Welton Becket and Associates
Associate Architects: M. A. Ham, Associates, Inc.
Consulting Engineers: Seelye, Stevenson, Value & Knecht
General Contractor: Rea Construction Co.
Precast Concrete: Concrete Materials, Inc.



This 14 story, 119′ square precast concrete structure has identical facades composed of 20′ high Vierendeel trusses assembled from precast chord and vertical elements. Total height from first floor to top of seventh truss is 195′. The trusses on each side are supported by two precast columns at third points. The trusses cantilever 33′-9″ beyond each column.

Post-tensioning with STRESSTEEL Bars ties together this entire structure. The bars pass through the columns and continue the full length of the Vierendeels, tying the chords and verticals into a unified truss. The rigidity of these 1⅜″Ø high strength steel bars, 14 to each truss, made it possible to place and post-tension the many precast components at minimum cost in time and labor.

Have you considered the possibilities of expanding the use of precast concrete by means of post-tensioning? Stressteel is a leader in this field. May we help you?

Write for Stressteel Technical Bulletin describing this project in detail.

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New Products

Furnishings

New Furniture Firm

With his sense of elegance and customary individuality, Ward Bennett has designed a line of furniture that is marketed under his own name. Among the pieces are lounge and desk chairs, desks, tables, and sofas (one copiously tufted, another sumptuous in suede). A large,





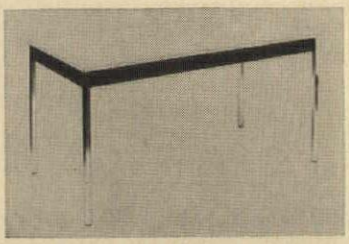
stainless table pedestal has sculptured contours that reflect stresses; occasional tables, like the rest, are neat and crisply detailed. A walnut cabinet with distinctive stainless hardware has a black finish that leaves the wood grain showing. Lamps, sculpture stands, and accessories are also offered. Brochure available. Ward Bennett Designs, Brickel/Eppinger, Inc., 515 Madison Ave., New York 10022.

On Free Data Card, Circle 100

Folding Table

"No. 500 Series Customline" folding tables for conference and executive dining rooms have 13/16" tops that consist of plastic laminate, solid core Formica "Supercore," and plastic backing sheet. Metal skirt, 3" deep, is finished in flat black. Welded tubular steel legs (1⅛" sq) are finished in mirror, or satin chrome, or flat black enamel. Single lever controls folding mechanism by activating individual lock for each leg by means of short throw cam and torsion bar. Oil-finished teak or walnut veneer tops with ¼" banding areas are also available. Howe Folding Furniture Inc., 360 Lexington Ave., New York, N.Y.

On Free Data Card, Circle 101





Hi-Fi System

"Project G" high-fidelity system features speakers that are outside cabinet. They are placed into "sound globes" that can be turned to adjust the recording to the acoustics of room. Sound globes are mounted on pressure-adjustable nylon bearings supported on cantilevered arms outside cabinet. With all-transistorized chassis, no heat is generated and no ventilation is needed. Unit is finished on both sides of the cabinet with Brazilian rosewood veneer. Clairtone Electronic Corp., 681 Fifth Ave., New York, N.Y.

On Free Data Card, Circle 102

Construction

Stainless-Steel Roofing System

Installation of stainless-steel roofing system for use on standard roofs, special roof shapes, and any existing or new nailable roof deck material involves four-step process, which forms a continuously welded



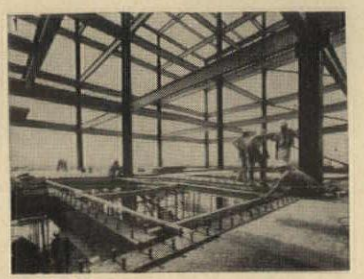
standing seam. *Flanging:* stainless-steel coil, 22" wide, passes between set of rollers which bend outer edges into standing position. One flange is ¾" and other is 1¼". Flanging equipment is adjustable, thereby allowing for various seam spacings up to maximum 28". Since flanging machine is portable, it permits on-site forming and eliminates costly transportation charges. *Cleating:* cleat is attached to deck with stainless-steel nails or screws. Then lower flange is spot-welded to sliding portion of the cleat. Sliding cleat permits expansion and contraction and prevents unsightly distortion. *Welding:* seam is formed by self-propelled welder that operates at steady rate of 10′ per min., forming continuous weld along entire length of roofing seam. High flange of next sheet is placed against low flange of first sheet and spot welded. Continuous weld is then formed about ⅝" above sheet surface. *Folding:* equipment moves at 14′ per min. along previously welded seam, folding higher flanges over lower flanges. Both seam welder and folding machine can operate in either horizontal or vertical position. Fagersta Steels Inc., 6430 North Hamlin Ave., Chicago, Ill.

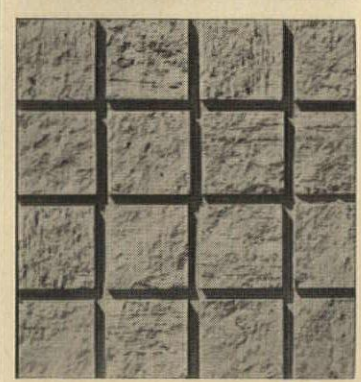
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Composite Steel System

Unique composite steel (ASTM A36) framing system has been used in Family Finance office in Miami, Fla. Composite system was employed because of large floor area panels—three 28′x28′ panels in one direction and five 28′x28′ panels in opposite direction for each floor. To span this length, 7½"-thick reinforced concrete slab was required. About 610 tons of steel reinforcing bars in two directions are used in 28′ sq slabs, which are tied to steel beams by about 12,000 stud shear connectors measuring ¾" diameter by 3" long. Shear walls, located at each end of building and at interior bent, provide resistance to severe hurricane winds on long faces of building. Also required were moment connectors of spandrel beams to columns in long walls to provide resistance to same winds on ends of building. Two-way, 7½"-thick concrete slab was therefore used to act as stiff horizontal plate to transmit wind loads to shear walls or long walls. For this project, Steward-Skinner Associates were the architects and Winston C. Gardner was the engineer. Bethlehem Steel Co., Bethlehem, Pa.

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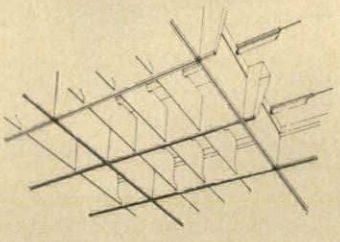




Mosaic Stone

Mosaic stone consists of natural stone in varied colors precast into backing of reinforced concrete. It is available in standard 2′ sq panels 3½" thick, as well as larger panels for special work. Split face or other finishes can be used.

Minnesota Mosaic Stone Products Co., Route 3, Mankato, Minn.
On Free Data Card, Circle 105



Modular Ceiling System

Recently developed modular ceiling system called "Quartette" coordinates all environmental functions of light, air, sound, and partition support into every module of ceiling. Each Quartette module contains fluorescent lamps shielded from view at 45°. Up to 400 ft-c and more can be achieved with minimum wattage. System returns 50 to 80 per cent of its lighting heat through adjustable returns over the lamps. Lamps are maintained at proper ambient for maximum light output and steady flow of air keeps lamps clean. Built-in attenuators prevent noise loss into plenum which is operated at a zoned negative pressure. All air baffles bisect the module in one direction and are individually attached to air supply ducts through flexible air hose. Where partition support is required on half module increment, side flow air outlets with directional and volume control are used. Or, bottom flow air baffle may be interchanged with blank air baffle for partition attachment. Bottom flow air baffle contains extruded aluminum lineal air diffuser that permits full 180° adjustable air pattern and complete flow rate control to blank off. Another method of air supply is through dampered, perforated air baffle. Again, air baffle is attached to individual supply sources, but directional control is not required because of low velocity. Quartette has ½″ sq continuous channel running along module lines in both directions. At intersection of module lines is extruded post. System is supported by corner post and imparts to post considerable rigidity. Attachment of partition ceiling channel to corner post carries this rigidity right to partitions. Standard movable partition panels are installed to partition ceiling channel in conventional manner. Gasketing is inserted in channel of Quartette module line baffle between partition ceiling channel and baffle. Luminous Ceilings Inc., 3701 N. Ravenswood Ave., Chicago, Ill.
On Free Data Card Circle 106

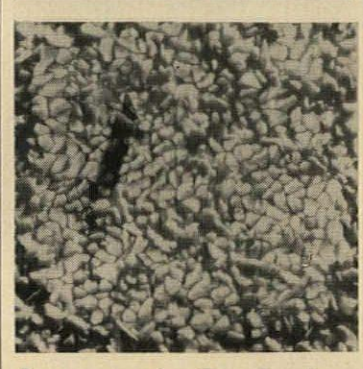
Electrical Equipment



Oval Fixtures

Rimless fluorescent lighting fixtures are offered in both oval and circle shapes. "Plex-Oval" unit is made of matte white "Plexiglas" with concave surface. It is available in 17″x28″, 23″x38″, and 29″x49″ sizes. They use two to six lamps, depending upon size of fixture. "Plex-Orb" units are produced in 2′, 3′, and 4′ circles with identical features of oval fixtures. They employ two to eight lamps and 20w to 40w, depending upon size and ft-c intensity desired. No brace is needed, as is the case with conventional fixtures. Peerless Electric Co., 576 Folsom St., San Francisco, Cal.
On Free Data Card, Circle 107

Finishes/Protectors

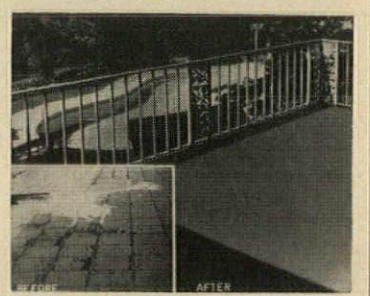


Aggregate Surfacing

Two interior and exterior aggregate wall surfacing materials — "Glamorock" and "Marble-Lite" (*shown*) — are offered. Glamorock is multicolored granite chip mined in Africa and applied by trowel. Marble-Lite, a large-size aggregate, is specially processed to permit blasting onto vertical surfaces to provide exposed aggregate type of facing. Both materials adhere readily to wood, cement, cinder block, or any oil-free surface. Surfacings are impervious to weather-changes, acid, and alkali fumes. Aggregate Surfacing Corp. of America, Wolf's Lane, Pelham, N.Y.
On Free Data Card, Circle 108

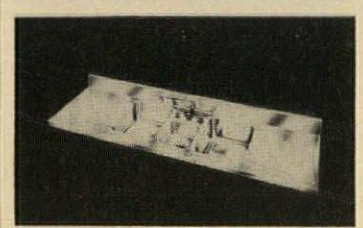
Waterproof Roof Deck

Waterproof, traffic-bearing roof deck in heat-reducing pastel colors has recently been produced. "Promdek" is elastomeric material that is completely monolithic, trowel-applied, and seamless. "Flote-Kote" is added to Promdek to



prevent snow, ice, and intense heat from affecting it. Promdek can be used on both old and new buildings, over concrete, steel, wood, or similar materials. When applied to recommended thickness of ¼″, it is only 2.2 psf. Selby, Battersby & Co., 5220 Whitby Ave., Philadelphia, Pa.
On Free Data Card, Circle 109

Special Equipment



Counter Sinks

Sloping drainboard counters on both sides of kitchen sink bowls are featured in two stainless-steel sinks. Three-compartment "Cuisine Center" includes garbage disposer in center. Large compartments on either side accommodate roasting pans, cookie sheets, or large utensils. Standard length is 7′, with longer lengths available. Two-compartment "Two Fifty Plus" includes left-hand compartment which is large enough to accommodate large roasting and broiler pans. Standard length is 6′ with longer lengths available. Elkay Mfg. Co., 2700 South 17 St., Broadview, Ill.
On Free Data Card, Circle 110



Wall-Hung Sinks

"Sani-Lav" stainless-steel, wall-hung lavatory is constructed of heavy gage #302 stainless steel with bright #4 finish. Features include double-welded skirt, which completely encloses the bowl; integral welded back splash; built-in nonbreakable stainless-steel, liquid-soap dispenser, and chrome-plated aerator and spout. All units are furnished with wall mounting assembly and double or single pedal knee or floor valve which is designed to permit all working parts to be easily removed from front without disconnecting plumbing or loosening mount. Columbia Sanitary Products Inc., Los Angeles, Cal.
On Free Data Card, Circle 111

Bathroom Fixture Insert

Aluminum insert has been developed for setting ceramic or chrome bathroom fixtures in ceramic or plastic tile or where no other tile or wall covering material is used. Inserts are shipped flat, but in manufacture are scored so that they can be formed into finished inserts in seconds, by simply using one's fingers. No special tools are required. Once insert is formed into its receptable shape, it is placed in the hole

of the wall. Flanges are then simply bent back to engage reverse side of wall, holding insert snugly in place. When plaster mixture is placed in insert and fixtures pressed in, some of the plaster is forced through these holes and back of insert. Some of it flows out to engage plaster wall; when it hardens, it anchors fixture in place. Inserts are available in sizes to install all standard bathroom fixtures and are available either in complete packaged sets to meet all of needs of single bathroom or separately as required. Dor-Ro Products Co., Chester, Mass.

On Free Data Card, Circle 112

Surfacing



Plastic/Chipboard Approved

High-pressure decorative laminate with standard chipboard backing has been approved by San Francisco's Bureau of Building Inspection. Plastic-chipboard combination involves Westinghouse's "Micarta" laminate and U.S. Plywood's "Novoply" particle board core. Two materials are bonded together with combustion resistance phenol resorcinol glue. In standard tunnel test, which compares specimen material with asbestos and red oak flooring, .050" Micarta laminate became first standard chipboard core to come well within San Francisco's allowable maximum for both flame-spread and smoke density. As result, it qualifies for tops of built-in counters and vanities in multistory residential structures. Westinghouse Electric Corp., Micarta Div., Hampton, S.C.

On Free Data Card, Circle 113

here's the story*











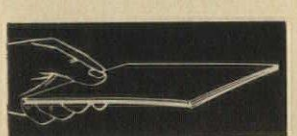
how Richards-Wilcox provided the know-how and products to solve the complex door problems at PAN AM Airways new jet facility, Miami, Florida

Take the problems of providing doors to combine new construction with previous facilities . . . plans for total and instantaneous release of blocks against the spread of fire . . . provisions for the constant handling of heavy traffic with a minimum loss of conditioned air—add to them the problems of less than normal overhead and side clearances in certain areas and you have the challenge Richards-Wilcox Engineers faced on the PAN AM job. This is the type of situation where R-W sets the standard for the industry, as they provide a single source for the design know-how and all of the products required to fill problem door openings.

Pictured above are just a few of the fifty-four Industrial Doors and Fire Doors that R-W designed and installed to solve these problems.

The complete story of this project is not only interesting to read, but could very possibly provide you with some effective solutions to similar problems. It graphically backs up our statement—"you provide the opening and R-W will fill it."

Richards-Wilcox offers a complete line of Industrial Doors, Fire Doors, hardware and electric operators *designed for each other*—a complete package assuring trouble-free installation and dependable service—products backed by R-W Application Engineering Service from original concept throughout the life span of the installed product.



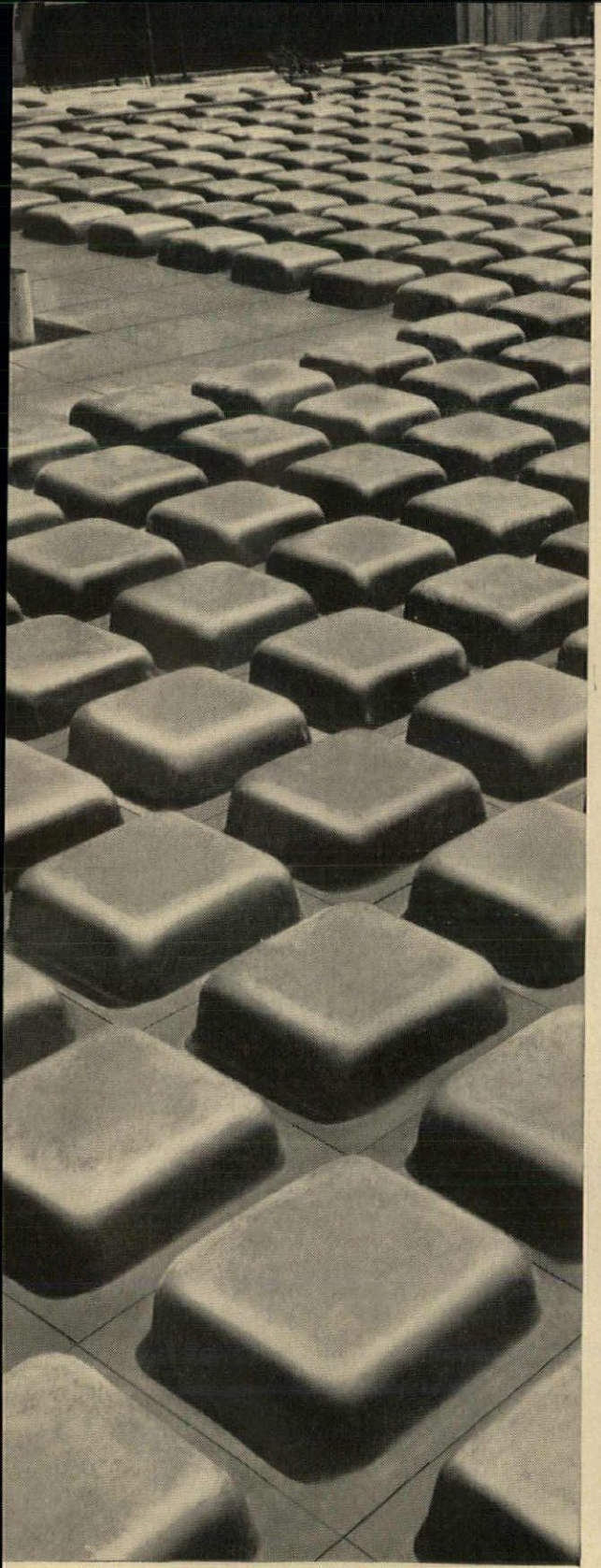
**Write today for your free copy of the PAN AM Story. In addition we will be glad to send you our latest Industrial Door Catalog for your file.*

HUPP CORPORATION

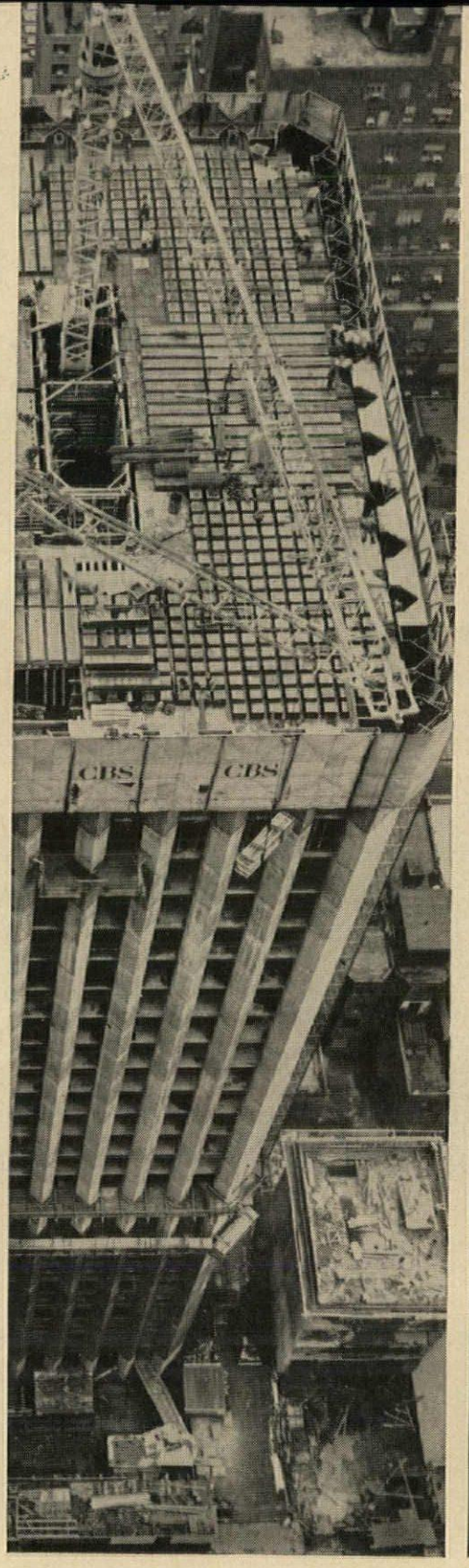
RICHARDS-WILCOX DIVISION

THIRD STREET • AURORA, ILLINOIS 60507

For more information, turn to Reader Service card, circle No. 412



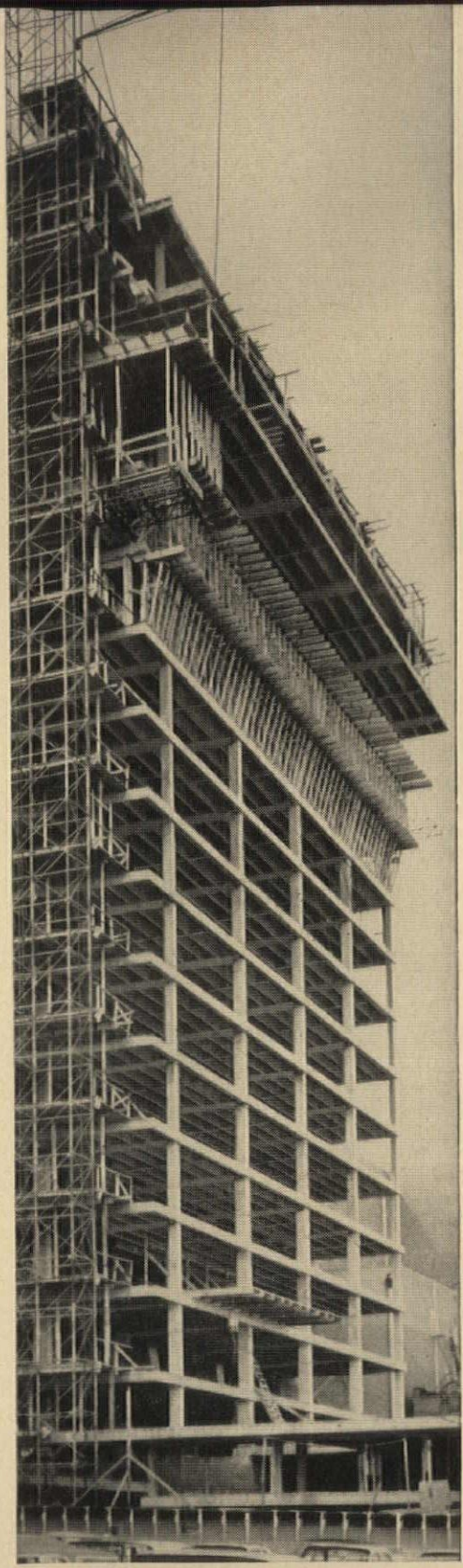
Ceco Steelform Service (Steeldomes illustrated) includes (1) furnishing, erecting and removing shores and open wood framing (centering), and (2) supplying the necessary Steelforms and labor for their erection and removal. Ceco Service takes the guesswork out of floor forming. The architect, engineer, contractor and owner know the final cost before the job starts. A firm quotation from Ceco takes the variables out of cost estimating.



Another Ceco high-rise project, under construction (Ceco Steeldome, Longform and Centering Service) / Columbia Broadcasting System, Administration Headquarters, New York City / Eero Saarinen & Associates, architects / Paul Weidlinger, structural engineer / George A. Fuller Company, general contractors / Brennan & Sloan, Inc., reinforced concrete construction / This 38-story project was erected on a tight schedule—a floor completely poured every four days.



Typical high-rise Steeldome project (Ceco Steeldome and Centering Service) / One Charles Center Building, Baltimore, Md. / Mies van der Rohe, architect / Farkas & Barron, structural engineers / Metropolitan Structures, Inc., general contractors / Bollinger-Leland Construction Company, concrete contractors / This waffle flat-slab design, with high-strength bars and lightweight concrete, cost 50¢ per square foot less than the alternate structural steel design.



In the Southwest, still another high-rise building (Ceco Flangeform and Centering Service) / Petroleum Club, Tulsa, Oklahoma / Kelley & Marshall, architects / T. C. Bateson Construction Company, general contractors / Ceco also formed the flush beams for the floor system, and the beams around elevator shafts and stair openings. Further, Ceco did the shoring for the roof overhang (illustrated). Call on Ceco for experienced forming service.

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with CECO Steelform Service

Look around the country at the new high-rise buildings. Everywhere you'll see monolithic concrete joist construction formed by Ceco Steelform Service. One Charles Center in Baltimore. CBS Headquarters in New York. The Petroleum Club in Tulsa. The Merchandise Mart in Atlanta. Kiewit Plaza in Omaha. Lamar Towers in Houston. These are only a few of the modern multiple-story buildings with floor systems formed by Ceco.

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For more information, turn to Reader Service card, circle No. 309

Manufacturers' Data

Air/Temperature

Gas Heating/ Cooling

"4-Seasons" combination zoned heating and cooling unit is described in 4-page pamphlet. Unit is 25,000-Btu sealed combustion forced-air gas heating furnace combined with 9500-Btu air-conditioning unit in cabinet that projects less than 10″ into room. System features through-wall vent complete with grille mounted flush with outside of wall. Sheet metal sleeve housing allows entire unit to slide completely out of wall into room for servicing. Temco Inc., Nashville, Tenn.
On Free Data Card, Circle 200

Air-Moving Devices

Bulletin No. 300, 24 pages, contains test code for sound rating of air-moving devices. Equipment test setups, and roof qualification procedures are described. Code applies to central station air conditioning, heating, and ventilating units; centrifugal, industrial, axial, and propeller fans; power roof and wall ventilators; and steam and hot water unit heaters. Air Moving and Conditioning Assn., Inc., Dept. PR, 205 West Touhy Ave., Park Ridge, Ill.
On Free Data Card, Circle 201

Construction

Pumice Block

"PNC 7" pumice block is introduced in 4-page pamphlet. According to maunfacturer, pumice aggregate block far exceeds ASTM and Federal specs. When used in high-rise buildings, it reduces steel needed for structural support of the pumice block applications by as much as 15 per cent. It meets UL requirements for 4-hr fire resistance in standard 8″ hollow unit. Pumice block walls are condensation-, mildew-, and vermin-proof. U factors of .10 to .30 are so low that 2″ of pumice gives as much insulation as 11″ of normal concrete. Standard untreated pumice 8″ wall has approximate db rating of 52 per cent. Mineral pigments can be added during manufacture to give permanent coloration. National Concrete Corp., Borden Ave. and East River, Long Island City, N. Y.
On Free Data Card, Circle 202

Designs for Utility Structures

Contemporary designs utilizing steel and consisting of generating plants, substations, and transmission towers are illustrated in color in 20-page booklet entitled "Power Styling." Collection of 85 design concepts include utility pole that incorporates sheltered bus stop, tall but compact substation designed for downtown locations, substation raised on stilts with view-of-the-city restaurant tucked underneath, wireless power transmission system using laser beams, and substations used as community centers. U.S. Steel Corp., 525 William Penn Place, Pittsburgh, Pa.
On Free Data Card, Circle 203

Access Floors

"Infinite Access" floors are described in 8-page booklet. They provide accessible under-floor space for cables and air plenum for heating and/or cooling, conduit, piping, or conveyors. High strength of entire floor area meets requirements for both concentrated and uniform loads in excess of those used in normal building practices. Interchangeable floor panels, 24″x24″, permit relocation of equipment services to accommodate changing conditions. Panels can be rotated between heavy and light traffic areas. Maximum space utilization is obtained, since maximum total floor system thickness is less than 1¼″.

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a specification from Hillyard . . .

FOR A GYMNASIUM FINISH that will withstand multiple use

PRODUCT NAME: *TROPHY® SEAL & TROPHY® FINISH*

DESCRIPTION: A seal and a finish especially formulated for wood gymnasium floors to give a light, durable, slip resistant playing surface that will resist rubber burning and marking.

SPECIFICATION AND HOW TO APPLY: An epoxy seal and finish. Apply with lambswool applicator. Seal coat fills porous wood surface. Game markings, using Hillyard Gym line paint, are painted in before finish coats are applied. Two finish coats are required. See Sweets Arch. File for detailed specification.

COVERAGE (Average): Trophy Seal—350 sq. ft. per gallon. Trophy Finish—500 sq. ft. per gallon.

TECHNICAL DATA: N. V. M.: Trophy Seal – 28%, Trophy Finish, 40%. Color: Gardner (typical) 4-5 (extremely light). Drying time: 7 hours to overnight (depending on humidity). Produces a glare free surface with proper light refraction. Exceeds all standards for abrasion resistance. Non-darkening—eliminates need for removing or sanding off finish for 10-15 years.

GUARANTEE: Controlled uniformity. When applied according to directions and under supervision of a Hillyard representative, all claims for the product are guaranteed.

MAINTENANCE: Regular treatment with Hillyard Super Hil-Tone dressing for conditioning and dust control.

APPROVALS: Maple Flooring Mfrs. Assn., Institutional Research Council. Listed by Underwriters' Laboratories as "slip resistant". Chicago Roller Skate Co. In use: 12 years on all major basketball tournament floors.

REFERENCES: Sweets Architectural File, section $\frac{13n}{Hi}$
A.I.A. File No. 25G
A.I.A. Building Products Register



Write, wire or call collect for complete information and specifications on Hillyard TROPHY SEAL & TROPHY FINISH. You may also want your nearby Hillyard architectural consultant to demonstrate TROPHY SEAL & TROPHY FINISH in your office or on the job site.



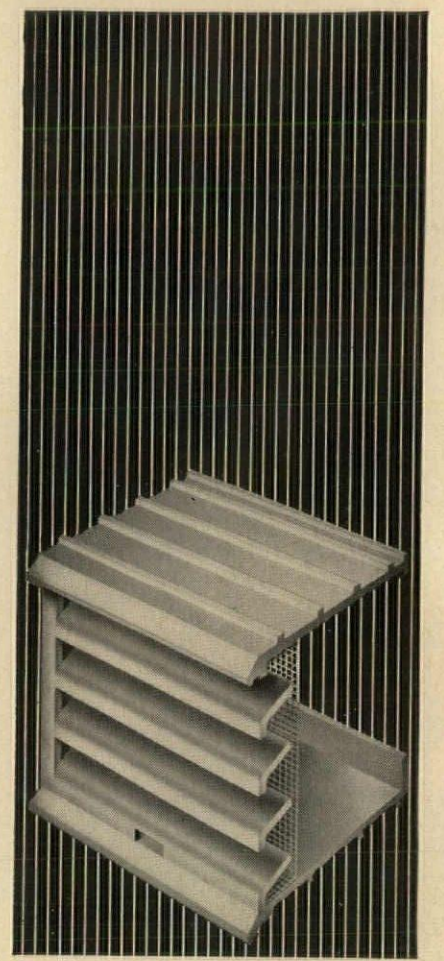
HILLYARD FLOOR TREATMENTS

Since 1907

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The Most Widely Recommended and Approved Treatments For Every Surface

For more information, turn to Reader Service card, circle No. 342



IT WILL PAY YOU TO INVESTIGATE C/S BRICK SIZE VENTS IN **EXTRUDED** ALUMINUM.

- NEATER IN APPEARANCE
- MORE ECONOMICAL
- SUPERIOR ANODIZED FINISH
- HIGHER FREE AREA THAN CONVENTIONAL CAST VENTS.

50 MODULAR SIZES FROM STOCK FOR BRICK, BLOCK, AND PRECAST PANELS.

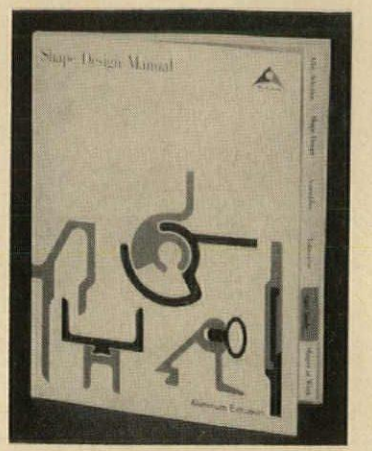
A HANDY STOCK-SIZE SELECTOR CHART IS AVAILABLE IN A NEW PRODUCT BULLETIN. WRITE FOR IT. WE WILL ALSO SEND FREE AREA AND RAIN INFILTRATION DATA.

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55 WINANS AVENUE
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C/S

For more information, circle No. 331

Tate Engineering Inc., 516 S. Eutaw St., Baltimore, Md.
On Free Data Card, Circle 204



Aluminum Shapes

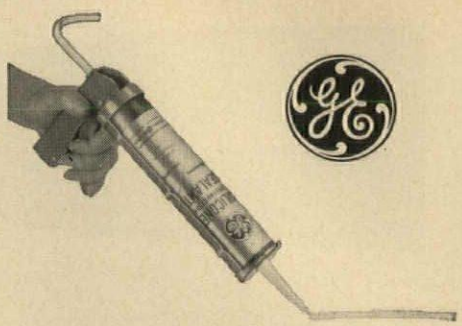
Hard-cover, illustrated manual, 88 pages, covers intricacies of aluminum extrusion shape design. It contains thumb-indexed chapters on alloy selection, shape design, assemblies, tolerances and shape applications plus 10-page case study complete with diagrams. It is available on request by letterhead stationery. Aluminum Limited Sales, Inc., Dept. I, 111 W. 50 St., New York, N.Y.

Prefab Roof Panels

Glass units of "Toplite" roof panels employ light-selecting prisms that transmit high percentage of light from north sky and low winter sun by rejecting heat and extreme brightness of high summer sun. Prefab "Atrium" and "Argus" models are available in many sizes for easy installation on any roof. Prismatic glass units are spaced on 1′ centers and are supported by extruded aluminum grid. Flange type rests directly on roof without curb and presents low profile. Curb type can be installed on conventional wood, steel, or concrete curb. Standard glass units with prisms at 90° to perimeter and diagonal glass units with prisms at 45° to perimeter are used according to building orientation. Products Research Co., 2919 Empire Ave., Burbank, Cal.
On Free Data Card, Circle 205

Presurfaced Panels

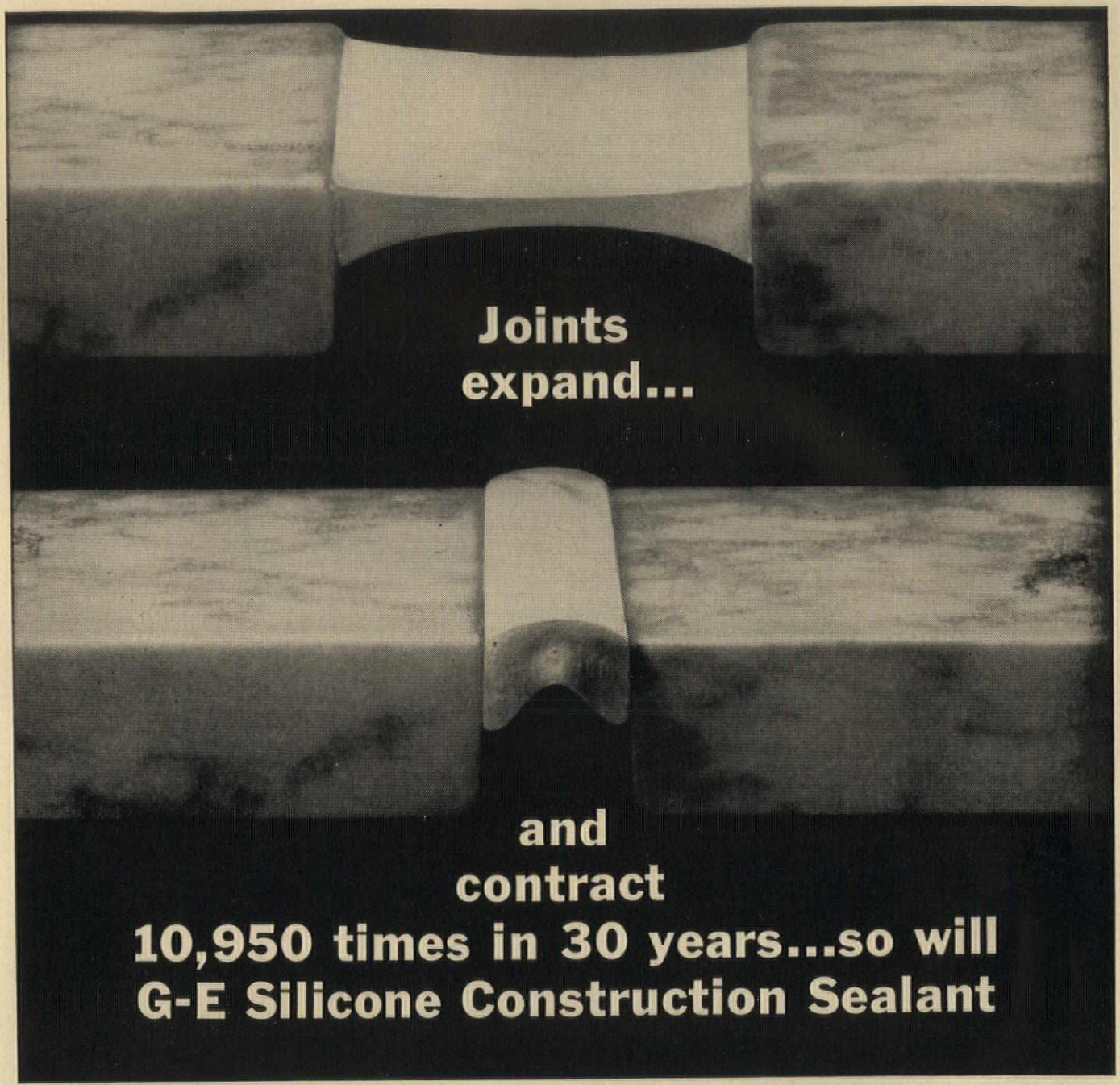
Lightweight, presurfaced wall panels, veneering panels, cur-



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GENERAL ELECTRIC



Construction joints go through the expansion-contraction cycle at least once a day, and far more often in modern curtain wall buildings. This is the major cause of sealant failure. In the past, even the best elastomeric sealants have been subject to early failure under severe compression-extension conditions. Because these sealants take a "set" during compression, they put a severe strain on the bond during extension. G-E silicone sealant, with almost 100% recovery after severe compression, withstands repeated cycling while maintaining an effective seal.

General Electric Silicone Construction Sealant will take this punishment for years because silicone rubber doesn't lose its elastomeric properties through exposure to sunlight or ozone, the deadly enemies of organic rubber sealants.

It is unaffected by ozone in any concentration over thousands of hours in accelerated aging tests. It withstands weathering, intense heat and sub-zero cold superbly. In fact, our tests support conservative estimates that it will last at least 30 years, much longer than *any* other type of sealant on the market.

G-E Silicone Sealant comes in a variety of non-fading, non-staining, non-bleeding colors including almost invisible translucent. It needs no pre-mixing or catalyst—bonds securely to all common building materials—can be applied easily, efficiently and quickly at any temperature.

For more information, check the listing of distributors. Or write, General Electric Company, Silicone Products Department, Section Q1118R Waterford, New York.

GENERAL ELECTRIC

For more information, turn to Reader Service card, circle No. 439

tain wall panels, column covers, and fire-rated panel walls are described in 8-page folder. Panel wall is 2-hr fire rated or incombustible interior-exterior wall system that is up to 66 per cent lighter than precast cement panels. Panels can be presurfaced in ceramic tile, travertine, slate, granite, aggregates, limestone, marbles, and other materials. Details of all types of panels and specs are given. Mosaic Building Products Inc., Jordan Ave., Moorsville, Ind.

On Free Data Card, Circle 206

Doors/Windows



Bonded Prehung Doors

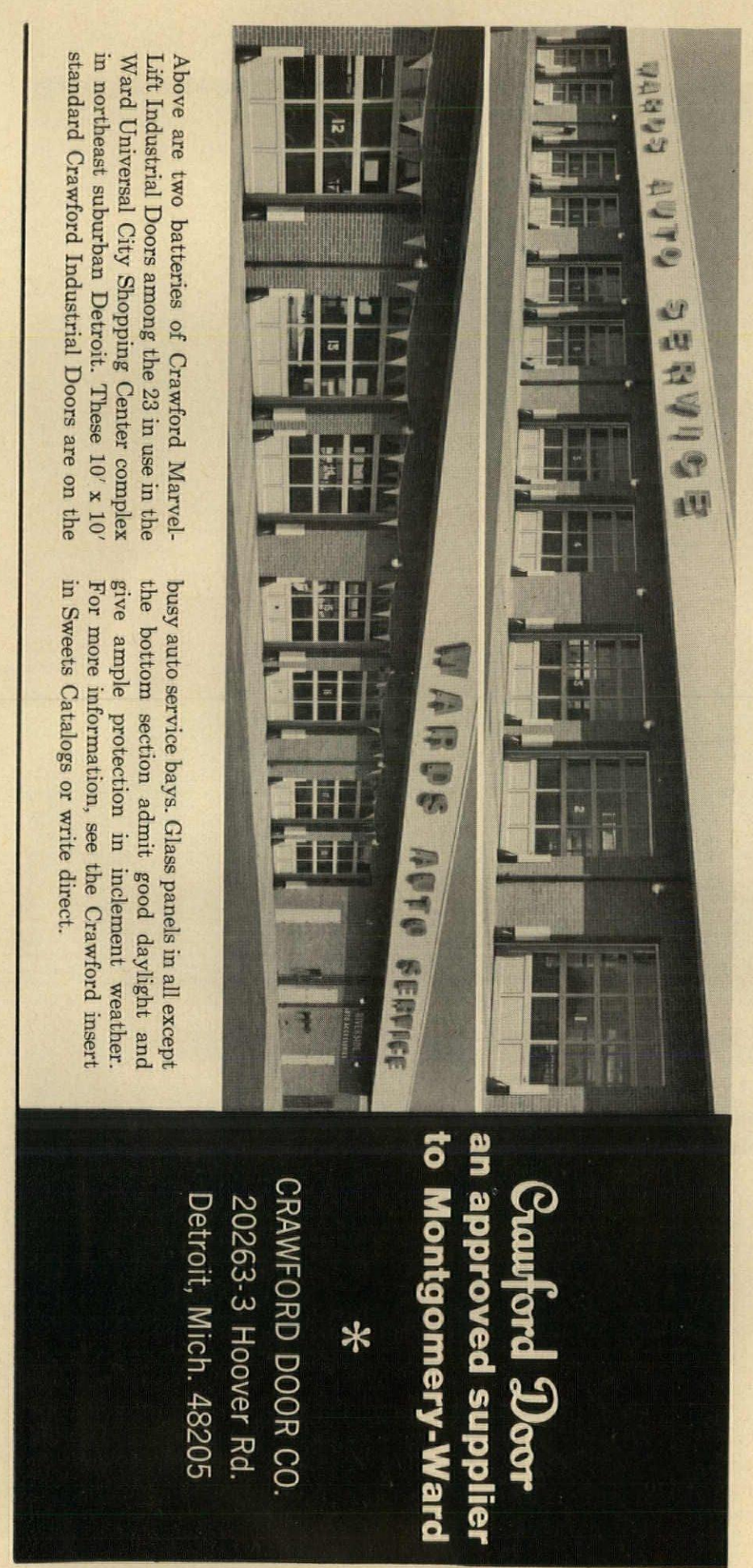
Recently developed series of prehung flush doors, called "LaPorte," is described in 4-page brochure. Basic door elements are interlocked and permanently bonded by internal expansion of highly adhesive foamed urethane core. Finishes range from embossed and colored-anodized aluminum to wide variety of textured and wood-grained vinyls laminated to steel. Door is prehung in either a unit frame or two-part frame of anodized extruded aluminum. Amarlite Div., Anaconda Aluminum Co., P.O. Box 1719, Atlanta, Ga.

On Free Data Card, Circle 207

Electrical Equipment

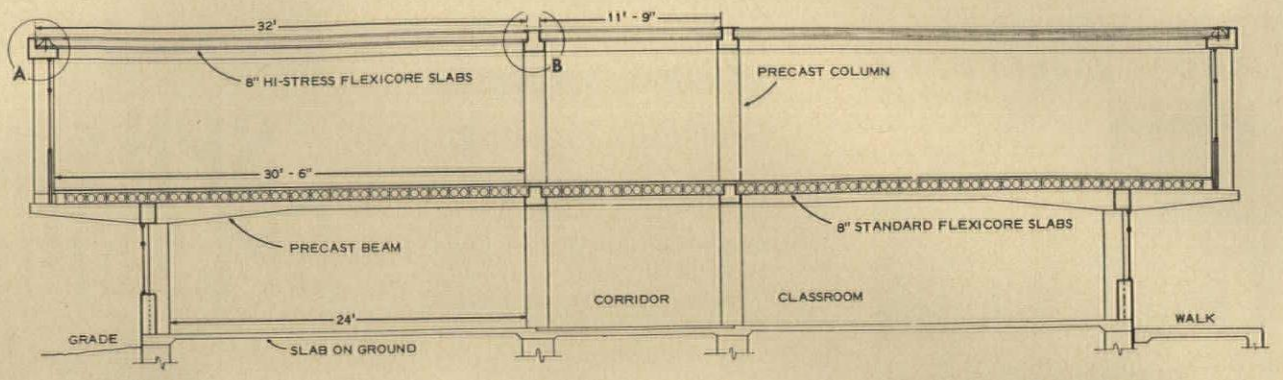
Landscape Lighting

Catalog, 90 pages, illustrates special lighting fixtures. Included are landscape lighting, esplanade lighting, fountains, and underwater lighting. Photos, details, and charts are given. Price list is included.



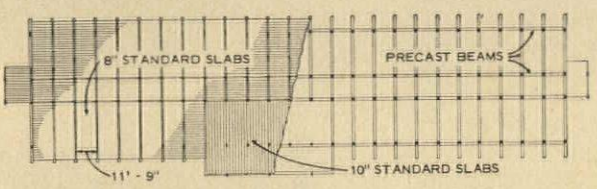
Above are two batteries of Crawford Marvel-Lift Industrial Doors among the 23 in use in the Ward Universal City Shopping Center complex in northeast suburban Detroit. These 10′ x 10′ standard Crawford Industrial Doors are on the busy auto service bays. Glass panels in all except the bottom section admit good daylight and give ample protection in inclement weather. For more information, see the Crawford insert in Sweets Catalogs or write direct.

For more information, turn to Reader Service card, circle No. 443

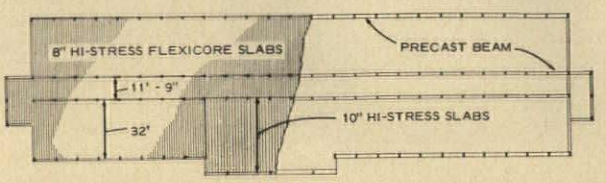


LATERAL SECTION. Hi-Stress Flexicore slabs, 32' in length, are used for long-span ceilings on second floor of classroom wing of Rutherford B. Hayes High School, Delaware, Ohio. The entire frame is precast concrete columns and beams.

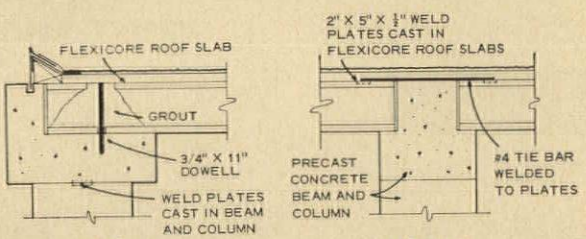
New Hi-Stress Flexicore Slabs Give Improved Performance On 32-Foot Roof Span



SECOND FLOOR FRAMING, CLASSROOM WING. Lateral precast beams serve as bearing for standard Flexicore slabs. Both 8" and 10" slabs used.



ROOF FRAMING, CLASSROOM WING. Longitudinal precast beams support Hi-Stress roof slabs which are tied to beams to provide lateral bracing.



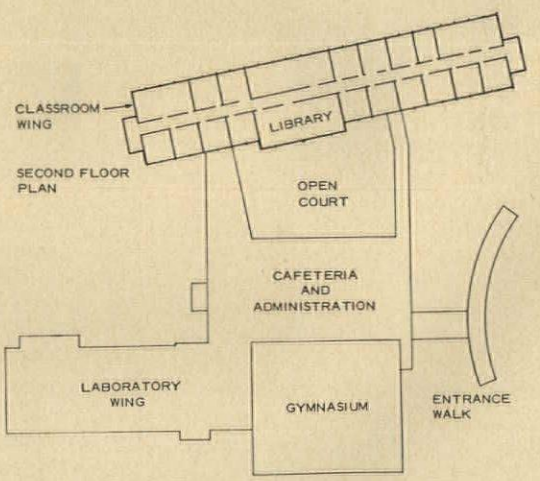
DETAIL A **DETAIL B**

New Hi-Stress Flexicore slabs use high-tensile 7-wire stress-relieved strands to produce fully prestressed units. These slabs provide long, clear spans, high load carrying capacity and give improved performance.

The steel strands are accurately pretensioned, before the slabs are cast, and introduce a controlled camber into the units.

In this project, Hi-Stress Flexicore slabs were used for 32-foot roof spans, and 12 months after erection, show excellent performance. Standard Flexicore units (with mildly pre-tensioned reinforcing rods) were used for floors at second story.

Ask for "Flexicore Facts 96" on this project and "Hi-Stress Flexicore" Bulletins. Write The Flexicore Co., Inc., Dayton 1, Ohio, the Flexicore Manufacturers Association, 297 South High Street, Columbus 15, Ohio, or look under "Flexicore" in the white pages of your telephone book.



RUTHERFORD B. HAYES HIGH SCHOOL, Delaware, Ohio has frame of precast concrete columns and beams, and floors and roofs of Flexicore precast decks. Kline & Swartz of Chillicothe, Ohio are the architects.



Long span Hi-Stress ceiling before partitions installed.



Lateral beams at second floor cantilever 7'-3".

flexicore®
PRECAST CONCRETE DECKS

For more information, turn to Reader Service card, circle No. 402

At Crerar Library...

Matot lifts speed 400 requests daily



Located in a new building on the campus of the Illinois Institute of Technology, Crerar Library averages 400 reader requests daily for technical research material.

PROBLEM: To locate and make requested material available to the check-out desk as quickly as possible.

SOLUTION: Two Matot truck-in book lifts and a pneumatic tube system. ***First***—requests are sent by tube to one of three employee-stations located on the first floor. ***Second***—an employee takes the request, locates the book and puts it on one of two centrally located lifts. ***Third***—the material arrives on the lift under the counter-top of the main desk where the librarian verifies it and checks it out. The entire operation takes 5 minutes. Up to 30 requests can be handled at one time. Returned material is loaded onto carts and trucked-into dumbwaiter for return to shelves.

Matot designs lifts for many uses: money lifts, food lifts and record carriers. Write for free information on how Matot can make a building and its employees operate more efficiently.

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Specializing in Dumbwaiters since 1888

See our catalog in Sweet's 23a Mat (S)

For more information, circle No. 425

Kim Lighting & Mfg. Co., Inc., 1467 No. Lidcombe Ave., El Monte, Cal.
On Free Data Card, Circle 208

Religious Lighting

Color photos depict contemporary religious lighting fixtures in 32-page booklet. Descriptive charts and details of various fixtures are included. NL Corp., 14901 Broadway, Cleveland, Ohio.
On Free Data Card, Circle 209

Better Lighting

"Footcandles in Modern Lighting" is subject of recent 30-page publication. Discussed are basic relationships of quantities of light with lighting quality, numerous benefits of adequate lighting levels, and economic aspects of good lighting. Tables list recommended minimum footcandles for particular seeing tasks, which include those of industry, stores, offices, institutions, residences, transportation, sports, and outdoor areas and activities. General Electric Co., Nela Park, Cleveland, Ohio.
On Free Data Card, Circle 210

Finishes/Protectors

Metal Finish Manual

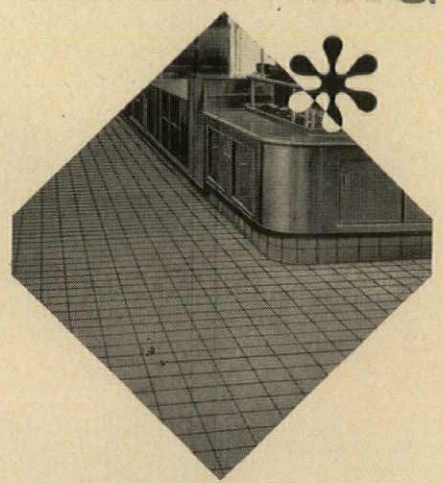
Recently published is 73-page "Architectural Metal Finishes Manual." Introduction discusses finishes by general classifications, function, source, variations in appearance, choice, and comparable applicability with other types of finishes. The following five chapters describe in complete detail finishes for aluminum, copper alloys, stainless steel, carbon steel, and iron. Organic, vitreous, and laminated coatings are also discussed. The National Association of Architectural Metal Manufacturers, 228 North LaSalle St., Chicago, Ill.
On Free Data Card, Circle 211

Industrial Coatings

Catalog on industrial coatings lists latest information on maintenance in eight categories, among which are interior wall maintenance with

wherever there's...

DRIPPING SPILLING SPLASHING



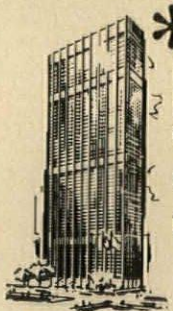
men who know tile floors best, specify and install

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JOINT FILLER

Wherever there's food handling, there's sure to be spilling, dripping and dropping. Ordinary grouts can't withstand the corrosive attack of food acids and alkalies. That's why Hydroment Joint Filler was specified for the quarry tile kitchens and cafeterias of No. 1 Chase Manhattan Plaza. It forms a permanently tight, dense, joint — non-toxic, odorless, highly resistant to wear and corrosion. It inhibits bacteria growth; very easily maintained. Widely used with brick or tile for over 20 years in cafeterias, restaurants, hotels, motels, hospitals, schools, etc. . . . wherever there is mass feeding and mass housing. Seven colors, plus black and white.

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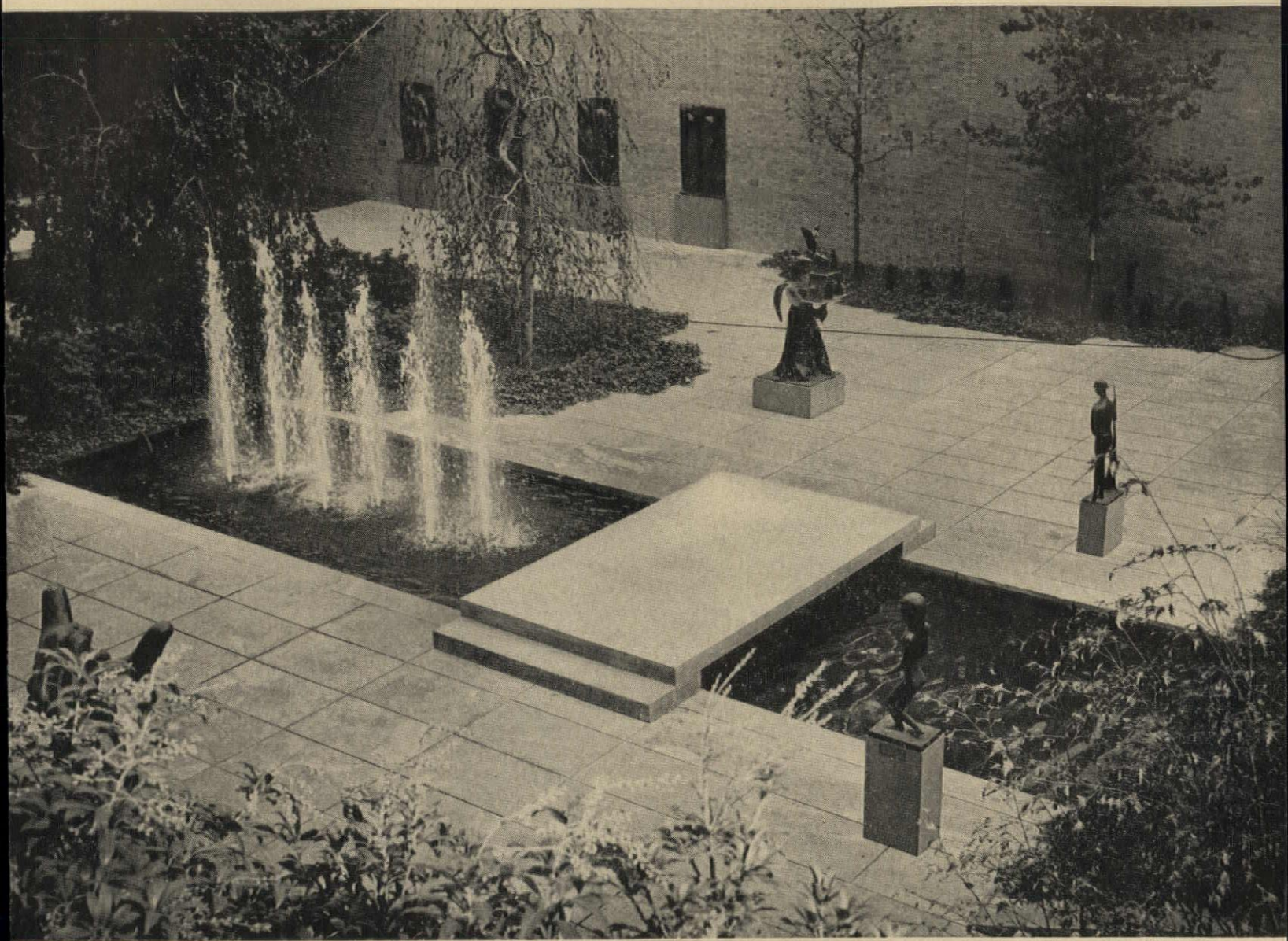
NO. 1 CHASE MANHATTAN PLAZA
Architect: Skidmore, Owings & Merrill
General Contractor: Turner Construction Co.
Tile Contractor: Peter Bratti Associates, Inc.

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For more information, circle No. 375

Lead-lined pools reflect sophisticated planning



ARCHITECT: PHILIP JOHNSON ASSOCIATES LEAD LININGS: JOHN F. ABERNETHY & CO., INC. GENERAL CONTRACTOR: GEORGE A. FULLER CO. PLUMBING CONTRACTOR: C. H. CRONIN OF N.Y. INC.

At The Museum of Modern Art, New York, is still another dramatic demonstration of how the virtues of lead give wings to architectural imaginations. And bring a gleam, in the bargain, to the eye of all concerned with squeezing the greatest value from every inch of space.

In the newly enlarged Sculpture Garden, the lead-lined reflecting pool, and verdant lead-lined oases of trees and grass, pleasantly backdrop art works on display, play a soft counterpoint to the rectilinear massing of the museum buildings.

Beneath this pool and planters are galleries and storage areas which prudence would have put elsewhere (or left out altogether) were it not for the lasting water-tightness that is uniquely lead's.

Lead is so workable, too. It conforms so readily to any shape. Initial cost is low and maintenance cost is nil; lead literally lasts forever.

Yours for the asking are: Detailed specifications on pools and planters, technical information on these and other modern applications of lead in architecture. Write Lead Industries Association, Inc., Dept. **N-1**, 292 Madison Avenue, New York, New York 10017.

LEAD INDUSTRIES ASSOCIATION, INC.

Look Ahead with Lead

For more information, turn to Reader Service card, circle No. 346

spec details on architectural, high solids, sanitary coatings and repair materials for wet and dry surfaces; preservation of surfaces subject to exposure of chemicals, gas, and moisture; selection of colors; floor preservation and maintenance including epoxy resurfacers, rubber base coatings, sealers, skid resisters, mortars, adhesives, and binders; outdoor wall and roof coatings; swimming pools, decorative inside and outside wall finishes and house paints. Section on surface preparation for steel and concrete for various types of exposure is included. Set of tables gives engineering data and sq ft cost comparisons for selection of optimum performance of metal primers, wall and floor coatings. Steelcote Mfg. Co., 3418 Gratiot, St. Louis, Mo.
On Free Data Card, Circle 212

Plastic Flooring

Brochure, 6 pages, introduces "Urapol," a two-component liquid polyurethane plastic flooring and roofing material. It contains no plasticisers, solvents, or emulsions, thereby enabling spraying of unlimited thicknesses. It coats concrete, wood, asphalt, lightweight cellular concrete and metal as well as existing surfaces. Impermeable elastomer provides seamless surface that will bridge post cracking in concrete. Urapol has high tensile strength, good elongation, resilience, resistance to abrasion, tear and compression set, and is virtually unaffected by oils, solvents, water, oxidation, and ozone. Poly Resins, 11655 Wicks St., Sun Valley, Cal.
On Free Data Card, Circle 213

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Children like redwood for the same reason they identify with trees and fields and brooks. They have an instinctive love for what is simple, unaffected, natural. Architects share this feeling and use redwood to create an environment conducive to happy, carefree living...surrounded by beauty.

To receive our quarterly publication, "Redwood News", write Department 61-A, California Redwood Association, 617 Montgomery Street, San Francisco.



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For more information, turn to Reader Service card, circle No. 391

Furnishings



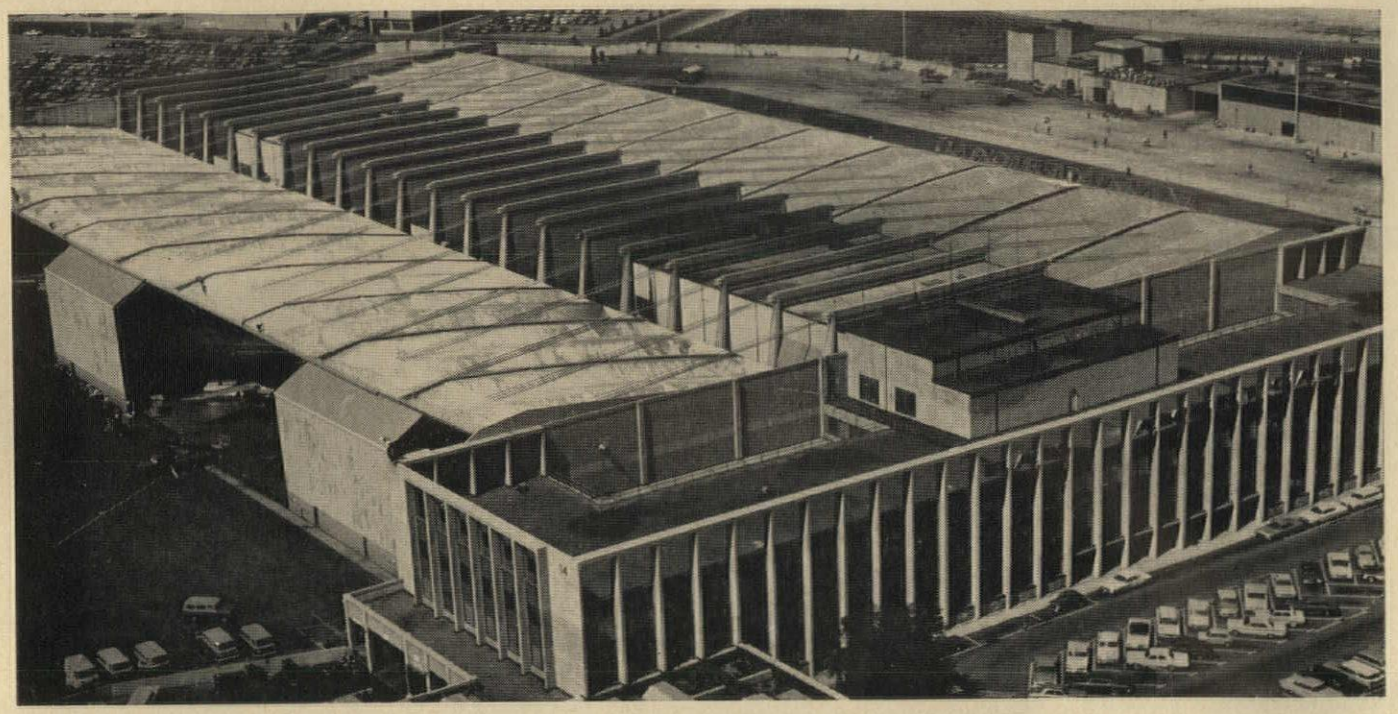
Herman Miller Furniture Catalog

Comprehensive, single-volume, loose-leaf catalog features chairs and seating systems; office and storage systems; tables and conference tables; and cases and beds. Catalog offers product and installation photos; drawings showing exact scale of furniture on graph paper at ¼″ to 1′; charts that depict not only "mechanics" of furniture devices but also potential combinations of modular seating and cases; suggestions for and combinations of colors, finishes, and materials; samples of textiles, vinyls, and plastics for shell chairs; drawings of special patented devices; photographs for use as presentation cut-outs; and detailed specs. Catalog costs $10, which includes continuing service of updating. Herman Miller Inc., Zeeland, Mich.

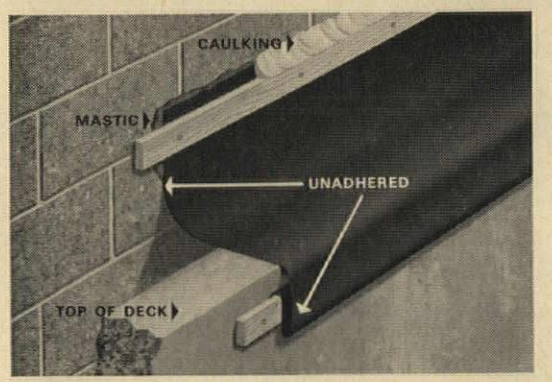


Knoll Additions

1965 additions to Knoll's loose-leaf catalog include four newly-introduced Mies Van Der Rohe reproductions (brochure



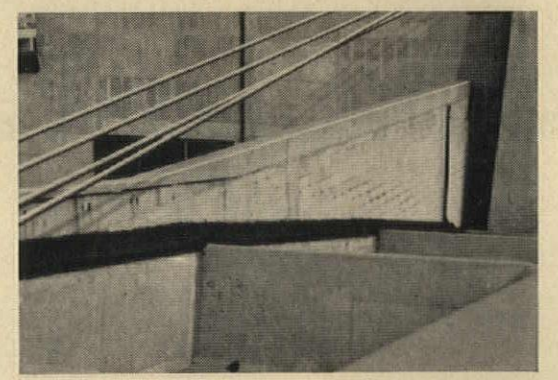
FLOATING ROOF CREATES WATERPROOFING PROBLEM...



TOP: Pan American Airways Hangar 14, John F. Kennedy International Airport, Jamaica, N. Y.

LEFT: Unadhered loop of BFG Flashing, mechanically fastened at top and bottom, spans gap between roof and wall to allow for movement.

RIGHT: The finished job . . . neatly installed and completely watertight regardless of movement.



BFG FLEXIBLE VINYL FLASHING SOLVES IT!

Shown here is one of Pan Am's Hangars at Kennedy International Airport. Its roof, covering nearly five acres, is of folded plate design, suspended by steel cables anchored to center columns. To accommodate anticipated movement, a six-inch opening was provided between deck ends and adjacent walls, creating a hard-to-flash area.

The original flashing, which failed after two years, was replaced with BFG FLEXIBLE VINYL FLASHING. This installation has been completely satisfactory and even now shows no evidence of deterioration. It's easy to understand because BFG Flashing is extra tough, flexible over a wide temperature range and weathers extremely well.

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Company_____

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available) and table and desk group with corner detail (*shown*), designed by Richard Schultz. Also included is welted and tufted swivel armchair designed by Vincent Cafiero. Knoll Assocs. Inc., 230 Park Avenue, New York, N.Y.
On Free Data Card, Circle 214

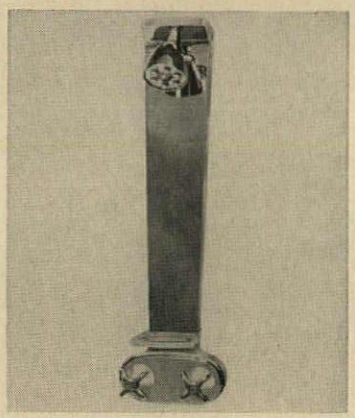
Danish/Finnish Designs

1965 catalog, totalling 65 pages, depicts Danish and Finnish designed furniture. Sofas, tables, armless settees, spanning table units, carrels, lounge chairs, and storage units are included. Photo illustrates each type and style of furniture. CI Designs, 230 Claredon St., Boston, Mass.
On Free Data Card, Circle 215

Auditorium Seating

Auditorium and stadium seating are described in 12-page brochure. Floor- and riser-mounted seating utilize various materials for their seats and backs, including upholstery, veneer, and plastic. Color photos and engineering layout chart are given. American Desk Mfg., Temple, Tex.
On Free Data Card, Circle 216

Special Equipment



A Shower of Showers

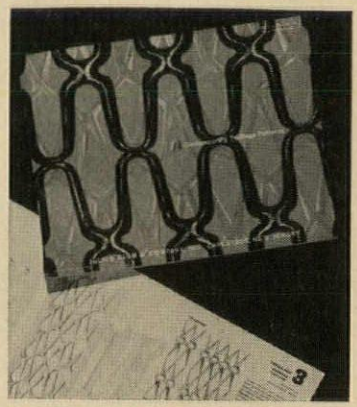
Catalog, 12 pages, describes shower heads and fittings, sink and service fittings, and eye and face wash fixtures. Featured is "Showerpac II" shower fitting/head used when two-valve unit is preferred. Unit has compression valves with monel parts and is equipped with "Anystream" shower head which permits instant adjustment of spray from full flood to five needle shower. Showerpac II is available in six models with or without built-in soap dish. Speakman Co., Wilmington, Del.
On Free Data Card, Circle 217

Urban Renewal Film

"Urban Redevelopment . . . U.S.A." is the title of a 20-minute film strip available from ACTION, Inc. Before and after shots of 17 American cities, large and small, should serve to stimulate interest in the field. For more information, contact ACTION, Inc., The National Council for Good Cities, 2 West 46 St., New York 36, N. Y.
On Free Data Card, Circle 218

Treillage Patterns

Bulletin, 8 pages, describes and illustrates expanded line of contemporary treillage patterns. Seven designs include recent additions of "Lattice," "Diamond," and "Cascade" patterns. They are made from high-strength malleable iron, which combines ease of fabrication with high resistance to breakage. For applications that require lighter weight, aluminum castings are also available. Treillage patterns may be used to form interior or exterior dividers, screens, grilles, railings, columns, and gates. Julius Blum & Co. Inc., Carlstadt, N.J.



On Free Data Card, Circle 219

Continued on page 79



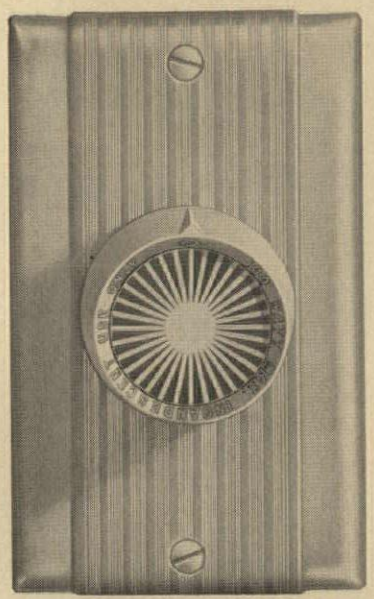
keeping Johnnie awake

There may well be another reason why Johnny can't read. It may be because he's being anesthetized by the dreary sameness of his school surroundings. In the big February issue of PROGRESSIVE ARCHITECTURE, the editors explore the problem and the exciting solutions developed by architects in various parts of the country. It's a 22-page presentation that's titled "Sequence of Spaces in Schools."

Also in February, you will see an outstanding picture story of interiors by Finland's Alvar Aalto; a trenchant report on the stultifying effect of regulatory agencies on architectural design; a full treatment of I. M. Pei's School of Journalism at Syracuse and a hatfull of provocative features, presentations and technical reports.

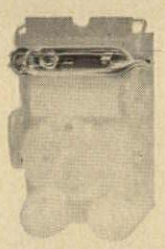
Your check for $5 will bring you the exciting February issue and eleven more, including the annual Design Awards issue in January of 1966. Isn't this the time to start your subscription to P/A? Address: Circulation Department, PROGRESSIVE ARCHITECTURE, Reinhold Publishing Corp,, 430 Park Avenue, New York N. Y. 10022.

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Materials in Modern Architecture, Volume I:
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DESIGN WITH GLASS is the first book in Reinhold's new "Materials in Modern Architecture" Series. These books are being created specifically to show the design potentials of wood, steel, concrete, glass, plastics, and clay products in modern architecture. The aim of each volume is to give insight into the materials that lie behind the surface design. This new series will provide in photographic reproduction the imaginative and inspirational uses of materials by modern masters from all over the world. Careful architectural drawings will reveal the great details of our times. These will combine the beautiful with the practical in a unique and unsurpassed structural idea series on modern architecture.

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Continued from page 76

Surfacing

Liquid Plastic Floors

Brochure, 4 pages, describes "Selbaflor" resin matrix type of flooring. Resin matrix is polyurethane liquid poured on-site and catalytically cured to resilient, tough, seamless surface. Decorator flakes are plastic, thereby giving resilience to finished floor. Selbaflor is laid down in seamless coating only 1/16" to ⅛" thick. It is non-slip, with 100 per cent recovery factor even after removal of equipment casters. Plastic flakes provide more than "42,-875" color variations. Brochure gives color photos of several patterns, as well as specs. Selby, Battersby & Co., 5220 Whitby Ave., Philadelphia, Pa.

On Free Data Card, Circle 220

Carpet Pattern Process

"Colorset" electrostatic method for creation of multicolor patterns in any form or shape on tufted carpet is described in 10-page booklet. Dyestuffs used in Colorset process are premetalized and drawn completely through yarn and fibers. Because dyestuff is applied after carpeting is tufted, patterns can be curvilinear. According to manufacturer, Colorset process results in as much as 50 per cent reduction in costs of labor and 30 to 50 per cent saving in carpet costs of same quality. Any number of color schemes for one design can be made from one basic tufted carpet. Several designs are shown. E.T. Barwick Mills, Inc., Chamblee, Ga.

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PROGRESSIVE ARCHITECTURE
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REINHOLD PUBLISHING CORPORATION
430 Park Avenue, New York, N.Y. 10022

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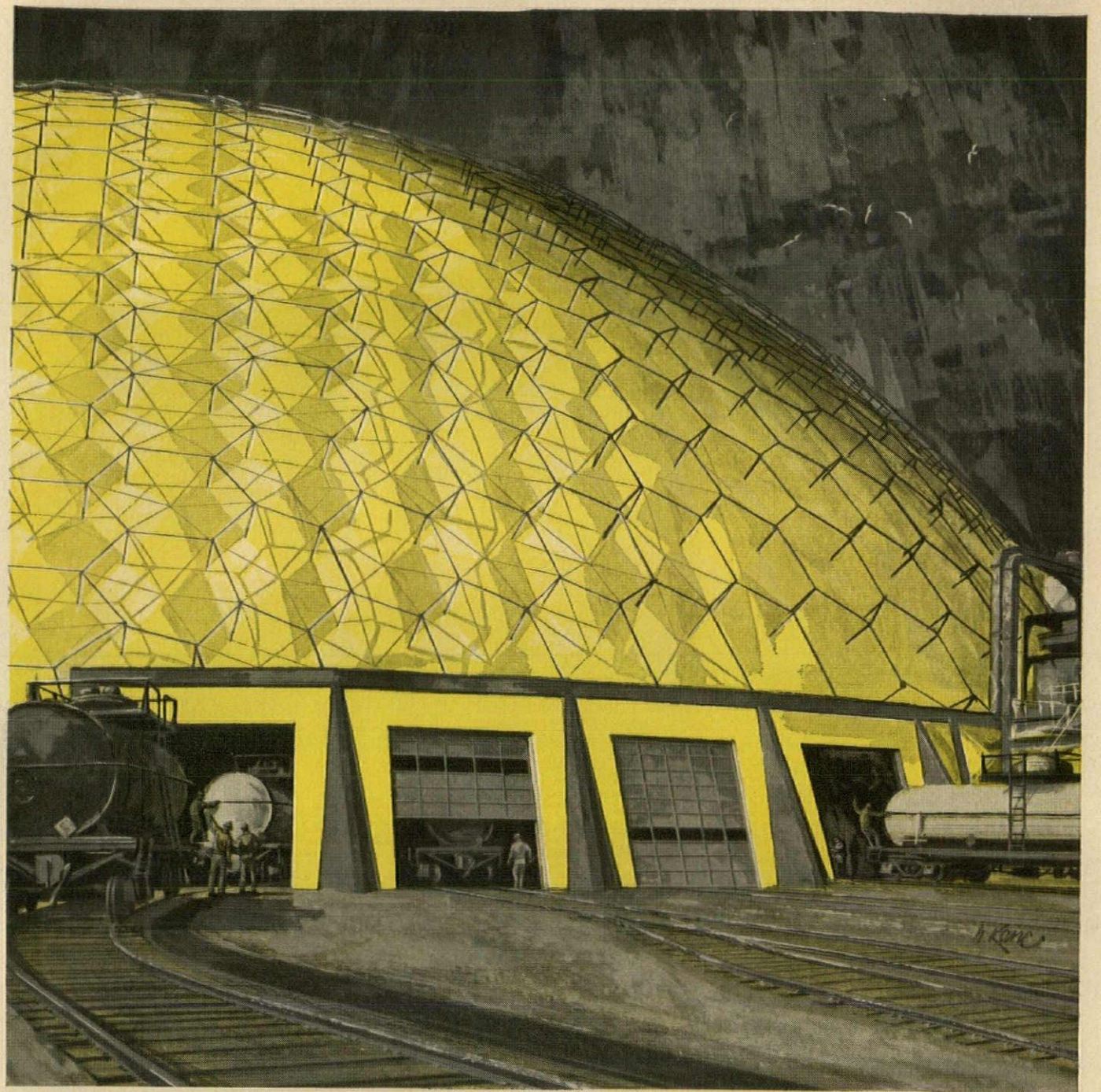
The plus is a big one — surfaces of Videne, the polyester surfacing film made by Goodyear and applied with their technological capabilities to Modern wood panels. Result, partitions and wall panels of surpassing beauty and durability. Modern's Videne surfaces are dimensionally stable, they won't crack or chip, they're more wear-resistant than commercial wet finishes and plastic laminates. Available in four different systems for every commercial interior need — all in a choice of 16 superb wood grain finishes, 34 non-fading colors, and 6 striking design patterns.

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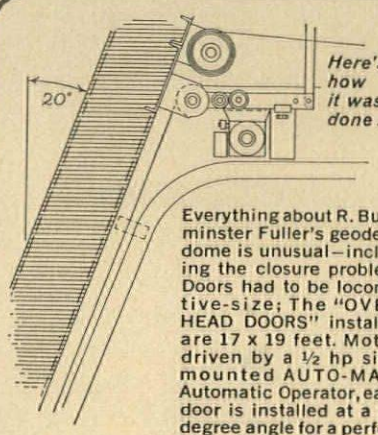
You may never square off with a roundhouse design, complete with geodesic dome by Buckminster Fuller. But you're sure to go many rounds with some challenging closure problems. When this happens, our Architect Design Service can help you solve them with skill and imagination, and the versatility of The "OVERHEAD DOOR."

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Here's how it was done . . .

Everything about R. Buckminster Fuller's geodesic dome is unusual—including the closure problem. Doors had to be locomotive-size; The "OVERHEAD DOORS" installed are 17 x 19 feet. Motor-driven by a ½ hp side-mounted AUTO-MATE Automatic Operator, each door is installed at a 20-degree angle for a perfect fit and an uninterrupted outside appearance.

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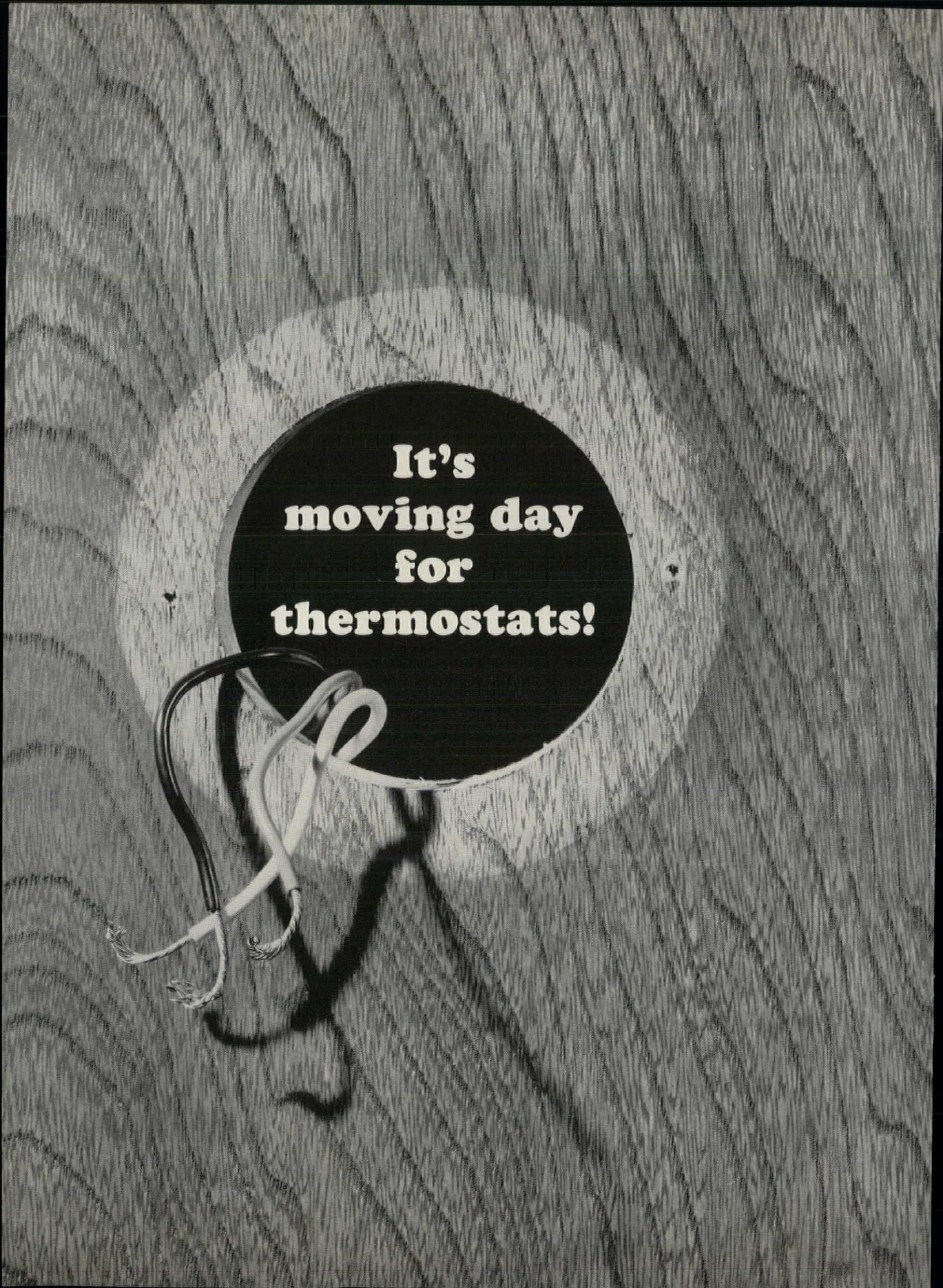


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great
What's so great about this Risom RGP chair?
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Well, for one thing, the way it does everything you could ask of a general purpose chair, without looking like one. For another, the way it takes punishment and shuns maintenance. What's more, it's really comfortable. And it has all the quality you expect of things Risom—at a most surprising price. May we send you details? Drop us a line at 444 Madison Avenue, New York 10022. (Oh yes, one more thing. It stacks!)



Risom
Jens Risom
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It's
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for
thermostats!

"Room thermostats belong on the wall"

ridiculous!

New Barber-Colman Heat-of-Light System puts the thermostat where it works best—in a moving air stream. Result: Temperature changes are detected up to 15 times faster than with wall-mounted thermostats. Clip coupon for complete information.

"Room thermostats belong on the wall." Ridiculous! Walls soak up heat (or cold). Wall-mounted thermostats pick up this heat or cold, so response to room temperature changes is slowed, resulting in overheating (or overcooling).

New temperature sensing element mounts in ceiling diffuser

Thermostats work best in a *moving* air stream. That's where Barber-Colman puts them in the Heat-of-Light System. Conventional, wall-mounted thermostats have been replaced by pencil-thin electronic sensing elements that fit in the air-handling system (in air/light diffusers, under-the-window units, ceiling diffusers). This new development in thermostat design and application means that the moving air surrounding the people in the room can be continuously sampled. Changes in temperature are detected and acted upon up to 15 times faster than with wall-mounted thermostats. Temperature control is more accurate and uniform.

What's more, moving the thermostat off the wall reduces installation costs. No drilling or channeling for electrical conduit or pneumatic tubing—low-voltage wires connect the electronic sensing element to the control system. Walls and panel dividers can be moved without altering the temperature control system. The costs of re-installing and recalibrating thermostats every time a partition is moved are eliminated.

New system combines lighting, heating, and cooling functions

Today, lighting levels of up to 150 foot-candles (or more) are common. Up to 85c of every dollar you spend for light at these higher levels ends up as heat. With the new Barber-Colman Heat-of-Light System, much of the heat generated by light, as well as people and equipment can now be put to work heating the building.

Air-handling lighting fixtures remove up to 85% of light-generated heat from the occupied zone. Barber-Colman's Jetronic mixing units capture this heat and use it to warm interior zones and offset heat losses at the building perimeter. Result: Ideal operating temperatures for fluorescent lights (75° to 80°F) are maintained—increasing light output by 15 to 20% over "static" fixtures. Lighting levels can be doubled (up to 200 foot-candles or more) without increasing conditioned air load.

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Computer helps you evaluate Heat-of-Light for your building

Now, take the guesswork out of designing your next air conditioning system. A simple one-page Feasibility Study (plus a few minutes work by our Transac 2000 computer) lets you evaluate a Heat-of-Light System before it's installed. The computer carefully studies each floor in the building. It calculates heating and cooling air temperatures for perimeter air systems . . . the number of light fixtures required . . . supply air quantity and temperature . . . and primary air quantities. You get an answer quickly—often within 48 hours. (More than 100 of our customers and prospects have used this computer service in the past six months.)

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...for style

monolithic reinforced concrete is the architects' design material

■ Architecture has come of age in America! In this architectural evolution, monolithic reinforced concrete is the preferred construction material. It can be molded freely into any contour and shape, and eliminates the many design restrictions imposed by all other construction methods. Through the use of reinforced concrete, architects can exercise complete freedom in the achievement of style, elegance, and individuality. Decide now to utilize the great design opportunities of monolithic reinforced concrete in your next building.



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FOUNDED 1924

Edens Theater, Northbrook, Illinois
Architects: The Perkins & Will Partnership
Engineers: The Engineers Collaborative
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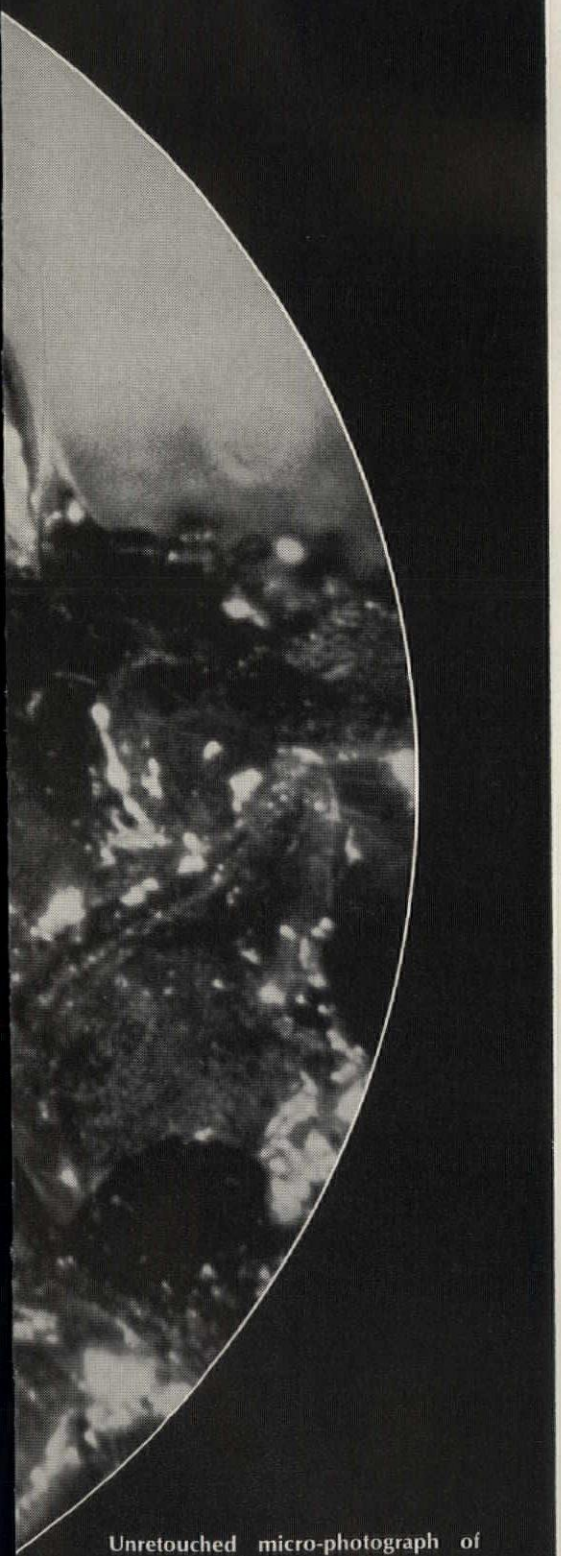
CONCRETE REINFORCING STEEL INSTITUTE
228 North La Salle Street • Chicago, Illinois 60601

5-64

Here's the proof in waterproof FOAMGLAS®



The only roof insulation with sealed glass cells that keep water out



Unretouched micro-photograph of FOAMGLAS and drop of water 24 times actual size. It's impossible for water to penetrate the sealed glass cells. Each sealed cell is a separate unit.

This micro-photograph shows you what makes FOAMGLAS the only waterproof roof insulation—it's the sealed glass cells that make up FOAMGLAS. Water or vapor could no more penetrate any of these cells than leak through a drinking glass.

Once your FOAMGLAS Roof Insulation is down, our 20-year guarantee protects your client completely. We can make that guarantee because FOAMGLAS will always keep its original insulating efficiency. Why? FOAMGLAS permeability (moisture absorption) is zero. No other roof insulation can claim that. Check it!

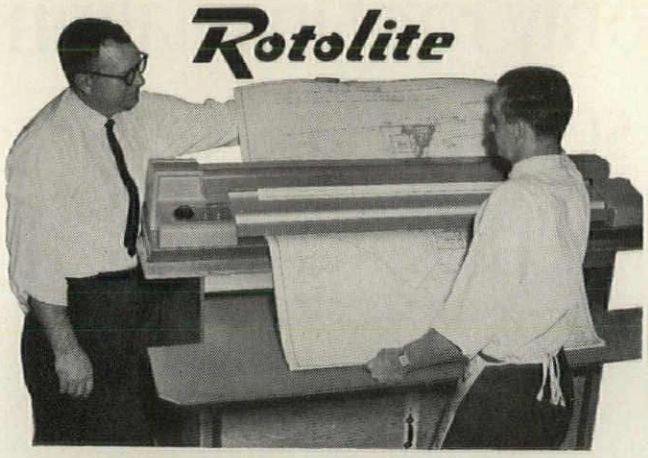
All other insulations will absorb moisture if the roof leaks or if vapor migrates from within the building. That can mean expensive repair or replacement.

Investigate the only waterproof roof insulation . . . available in 2' x 4' FOAMGLAS®-BOARD in thicknesses of 1½", 1¾" and 2". Test it yourself. Use the reader-service number to get a free sample and literature. Pittsburgh Corning Corporation, Dept. PP-15, One Gateway Center, Pittsburgh, Pennsylvania 15222.

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3 packs paper	$62.16
12 hrs. labor @ $2.63	31.56
Ammonia	1.00
Electricity	1.00
Total cost	$99.72

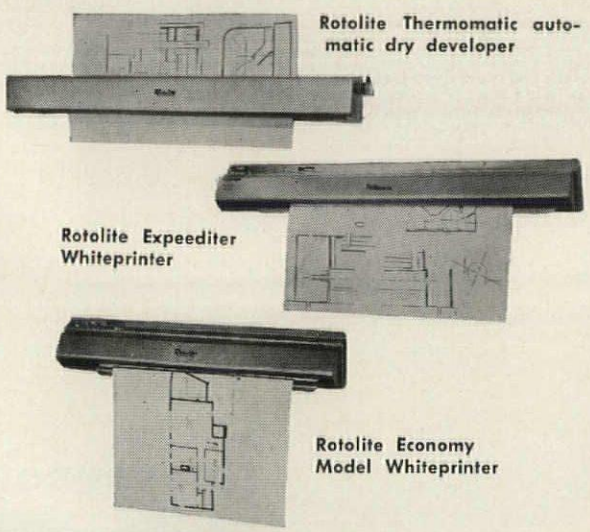
If sent outside at 6¢ per sq. ft. the job would cost $270.

Summary: Cost if done by an outside shop	$270.00
Cost in his own shop	99.72
Savings on this one job	$170.28

Three jobs like this and he has almost saved the cost of his Diazo-Jet.

He also uses the Rotolite for all his office forms such as job sheets, applications, time sheets, certificates, etc.

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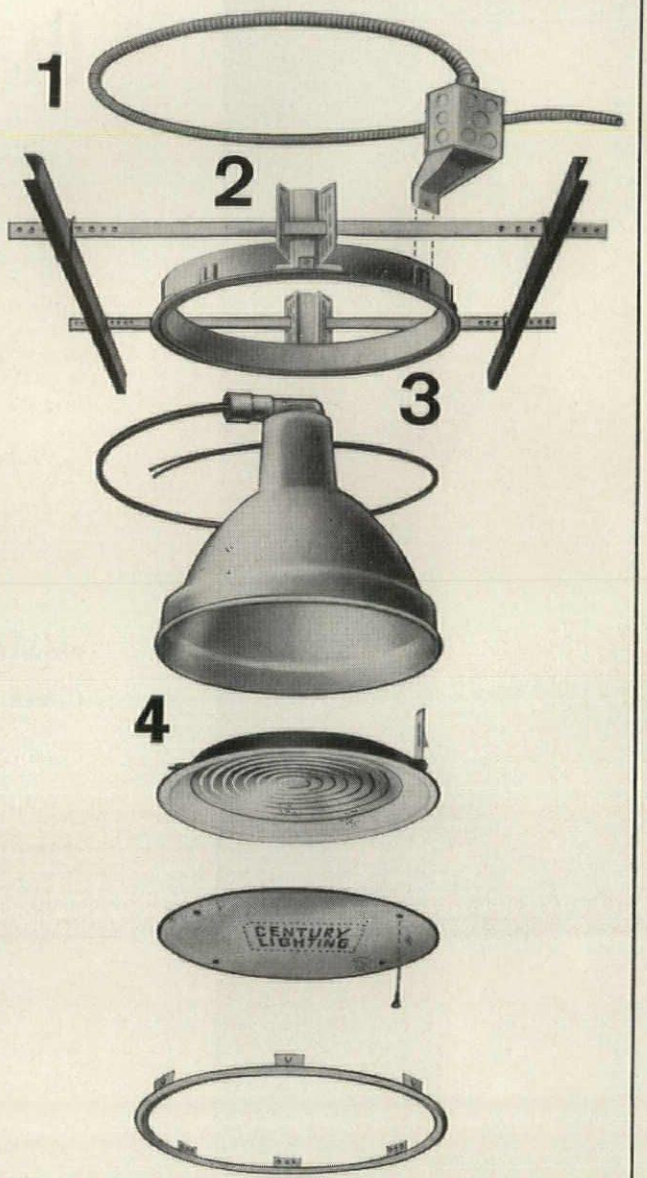
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For more information, circle No. 301 ➤



Do you measure architectural excellence by the pound-price?

Coppermetals are not the cheapest material you can specify for architectural accents—nor are they always the most expensive. But no other metal offers the inherent beauty, range of colors, forms, versatility and durability of true copper alloys. Furthermore, you can attain *all* these advantages without upsetting budgets, by using coppermetals in locations where the eye can appreciate fine design and component quality. And remember, the texture and colors of copper architectural metals are more than skin-deep. Copper may cost a bit more than substitutes. Don't you think it's worth it?

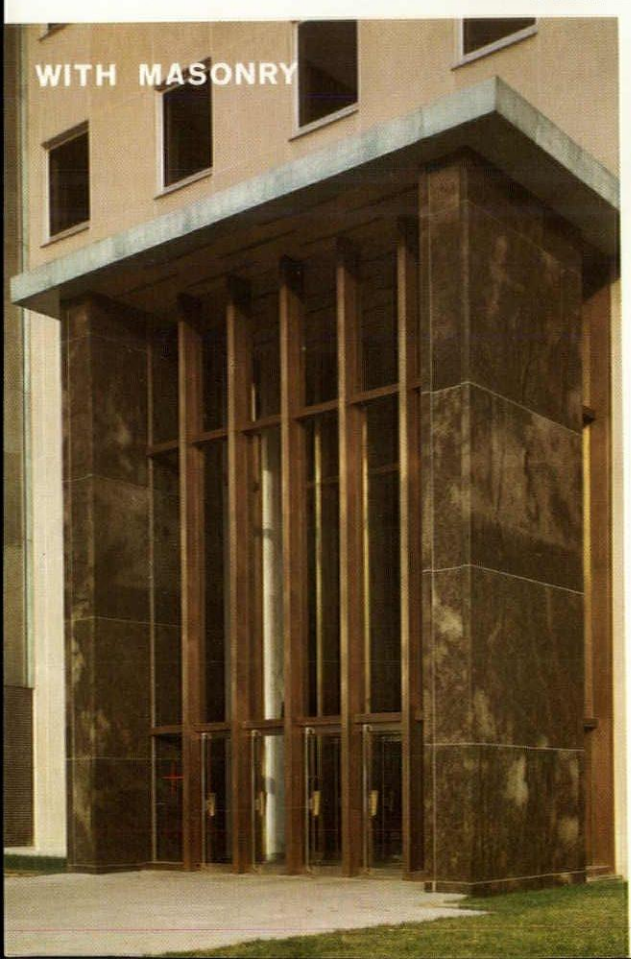
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To see what imaginative designers can accomplish through the judicious use of coppermetals, turn page ——▶

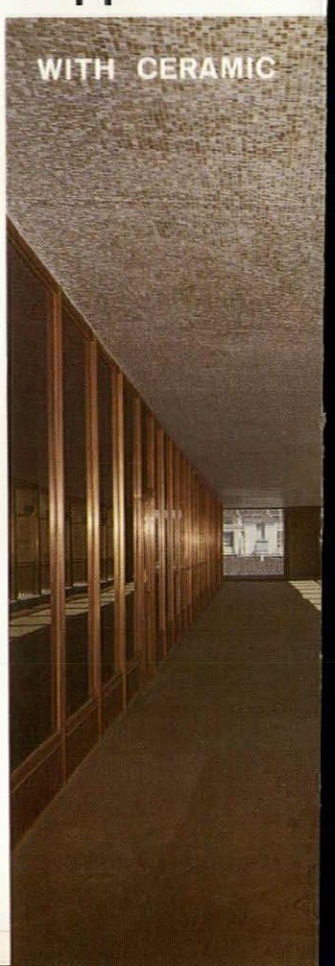


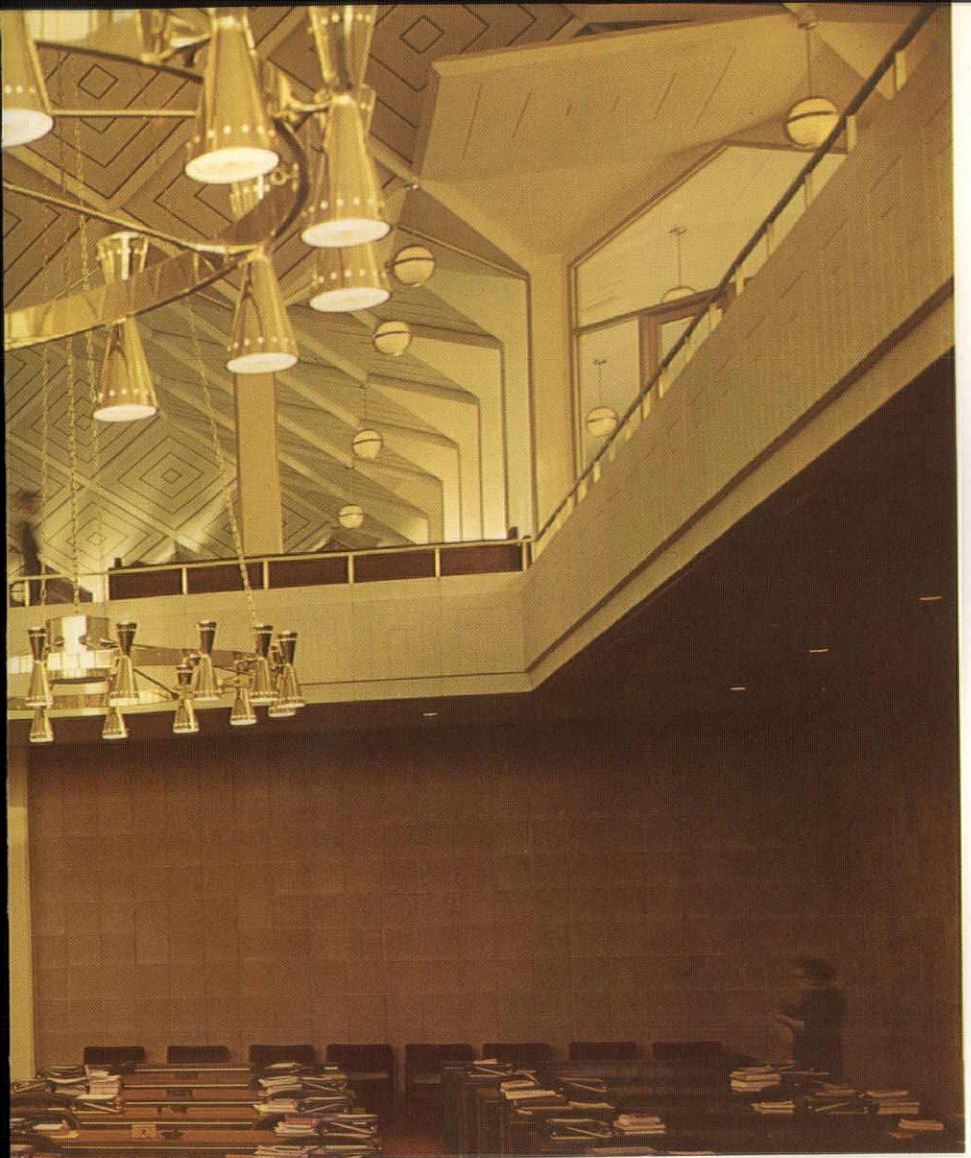
North Carolina State Legislative Building. Architect: Edward Durell Stone, New York City. Associate Architects: Holloway & Reeves, Raleigh, N. C.

Here's how leading architects use coppermetals



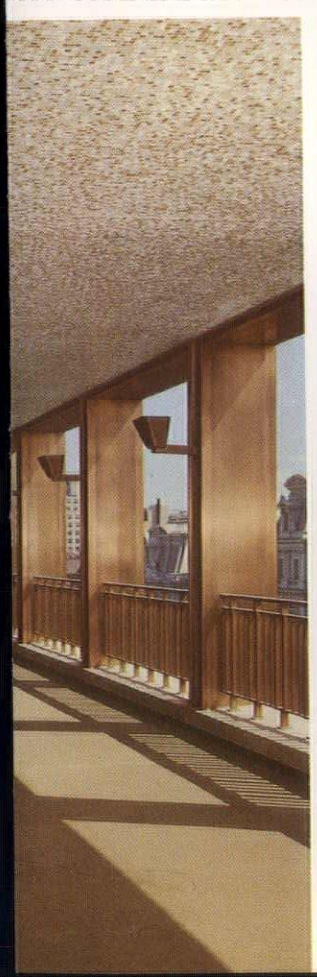






Fabricator: J. D. Wilkins Company, Greensboro, N.C.

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WITH FINISHED STONE: Interior, Public Safety Building, Rochester, N.Y.

WITH CERAMIC: F.D.I.C. Building, Washington, D.C. Architects: Chatelain, Gauger & Nolan, Washington, D.C.; Perkins & Will, Chicago, Ill. Fabricator: A. F. Jorss Iron Works Inc., Arlington, Virginia.

WITH GLASS: Eisenhower Presidential Library, Abilene, Kansas. Architect: John E. Brink, Iola, Kansas. Fabricator: Flour City Architectural Metals Div., Hupp Corp., Minneapolis, Minn.

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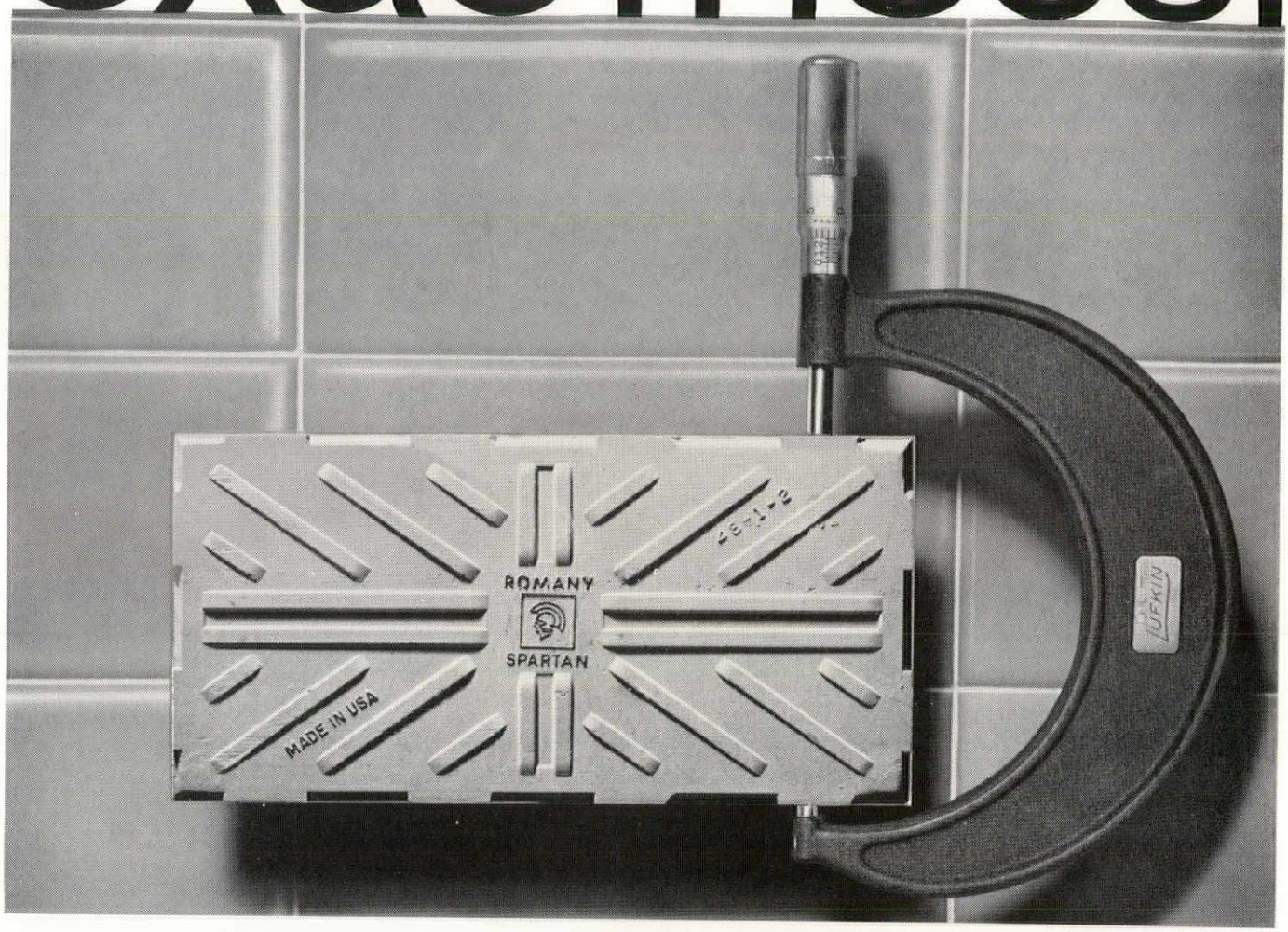
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Company_____

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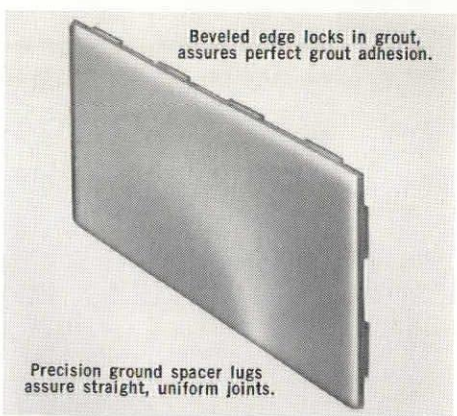
City_____ State_____

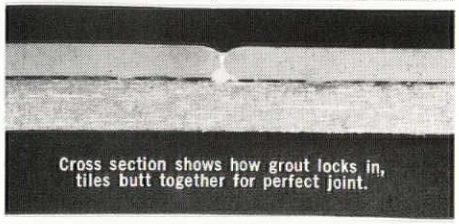
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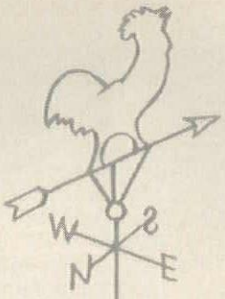
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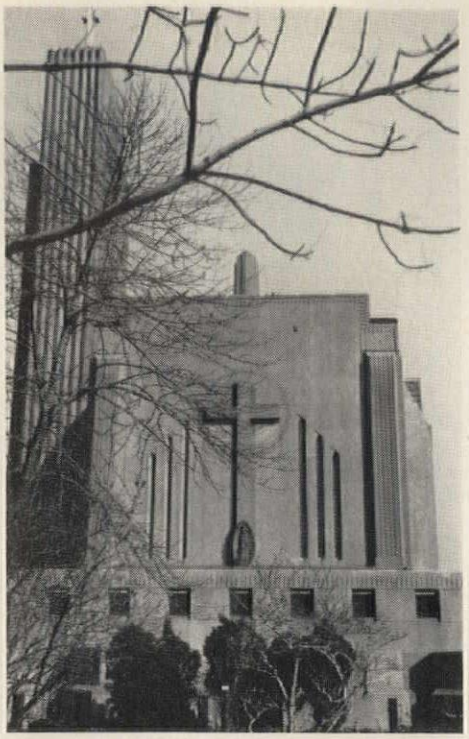


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the choice is

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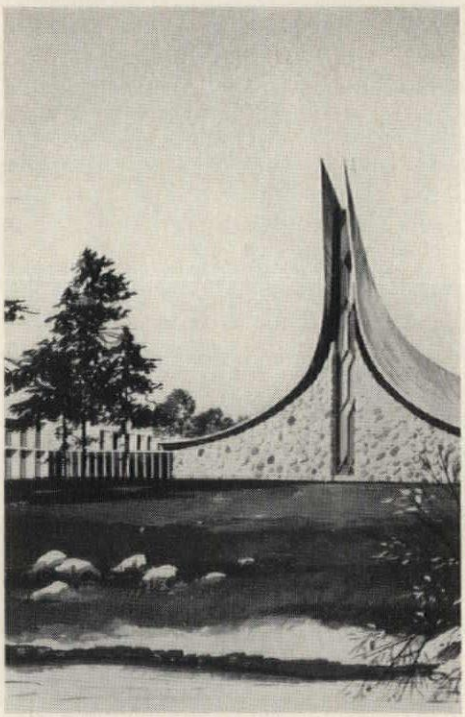


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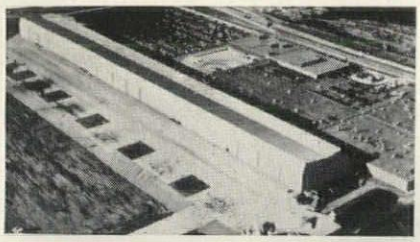
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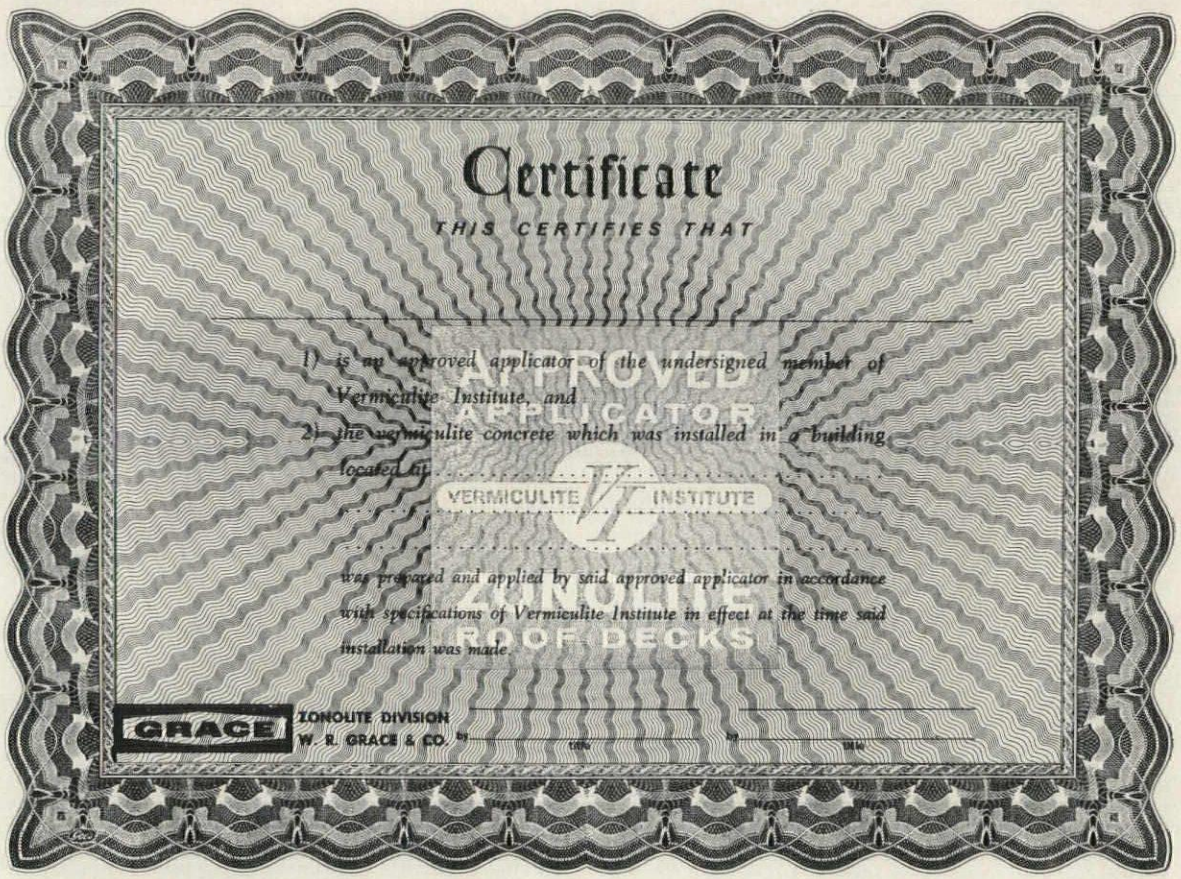
Tulsa Civic Center (Tulsa, Oklahoma)
Arch: Murray, Jones & Murray
Appl: Empire Roofing & Insulation Co.
W. A. Strong Co.



Northwest Airlines Main Overhaul Base
(St. Paul, Minn.)
Arch: Walter Butler Co.
Appl: Northern Placing Co.

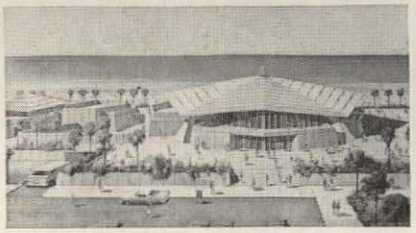


Salt Lake County Juvenile Home and Court Complex
(Salt Lake City, Utah)
Arch: Beall and Lemoine
Appl: Utah Pioneer Corp.

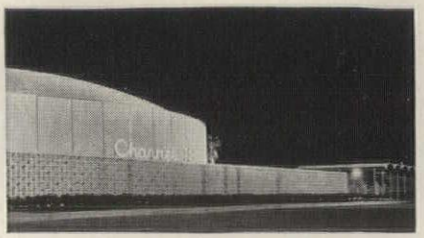




R. L. Cousins High and Elementary School gymnasium (near Atlanta, Ga.)
Arch: Tomberlin-Sheetz;
Eng: Chastain & Tindal
Appl: Southeastern Roof Decks



Municipal Recreation Center
(Jacksonville Beach, Florida)
Arch: Tomberlin-Sheetz;
Eng: Chastian & Tindel
Appl: Southeastern Roof Decks



KTRK-TV station (Houston, Texas)
Arch: Lloyd, Morgan and Jones
Appl: Shelton W. Greer Co., Inc.

Now the application of every Zonolite* Lightweight Concrete Insulating Deck is certified

That makes 141 reasons why no other roof deck fits your needs so economically, efficiently and safely

You are a lucky exception if you have not had substandard materials and substandard application of materials on your jobs.

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This assures the quality of your deck. But there are 140 more advantages to be considered.

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3. ANY DESIRED INSULATION VALUE can be obtained by simply varying the thickness of Zonolite Vermiculite Concrete.

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5. MONOLITHIC...continuous surface; no seams to allow tar drip in the event of fire.

6. INCOMBUSTIBLE...Vermiculite Concrete is all mineral, cannot possibly burn.

7. FLEXIBLE...can be used with form boards, paper-backed wire lath, galvanized metal decks or structural concrete. Adapts easily to conform to any drainage or slope problem.

8. SLOPES FOR DRAINAGE, as prescribed by the built-up-roofing industry, are easily and economically provided with Zonolite concrete.

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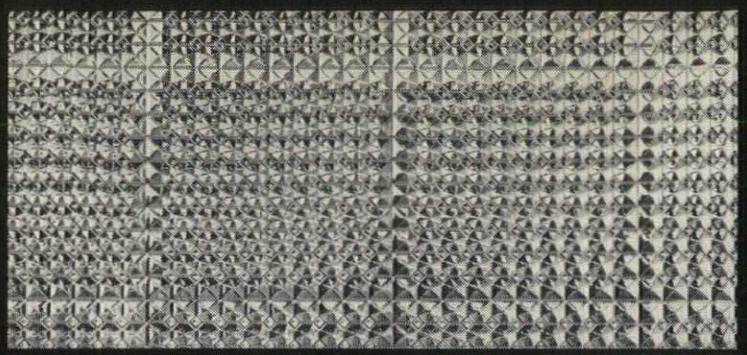
10-141. There are 132 skilled applicators who are approved to place these systems in strict accordance with the standard specifications of the Vermiculite Institute.

Other roof deck systems may offer three, four or five of the above advantages, but Zonolite Vermiculite Concrete is the only one that offers all 141. For complete specifications and data file, have your secretary drop us a note.

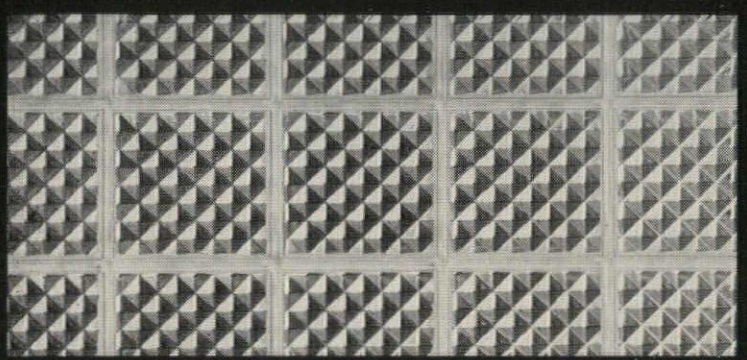
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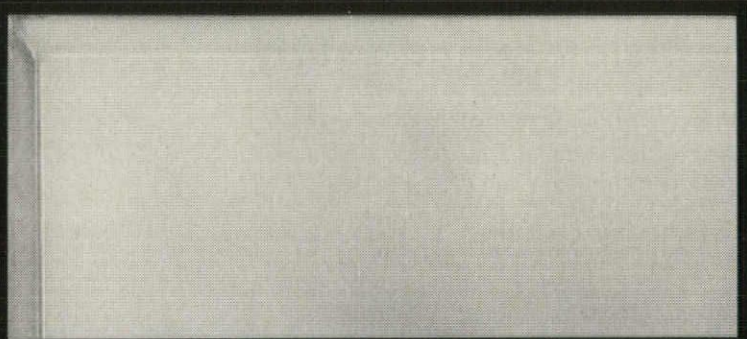
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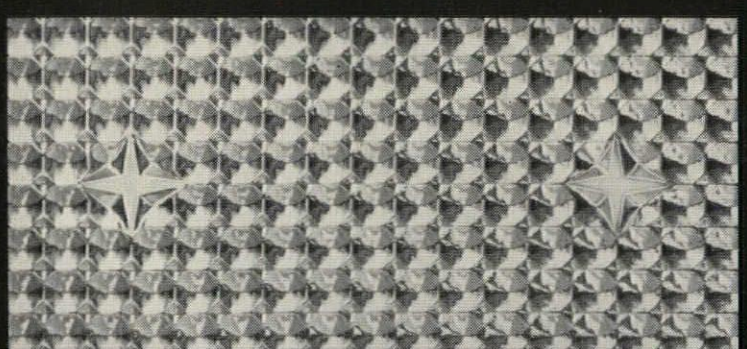
OCTEX Octagonal and square prisms in grid line of 2-1/2" squares. Acrylic or polystyrene. 1/2 ACTUAL SIZE



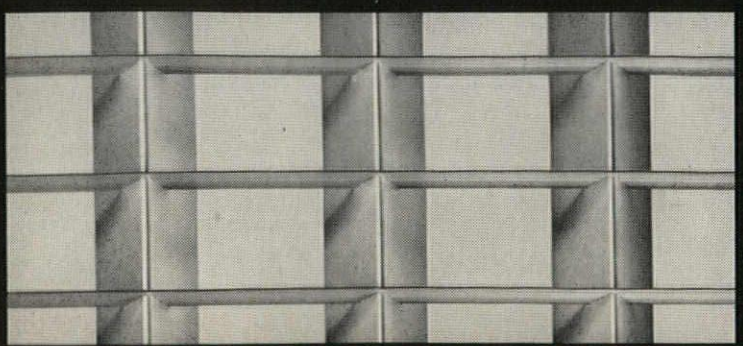
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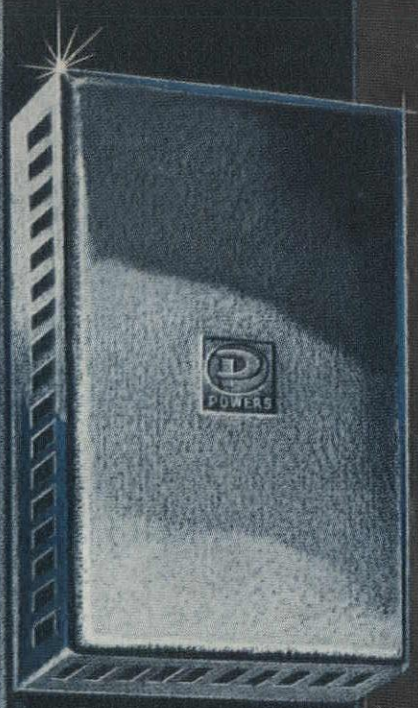
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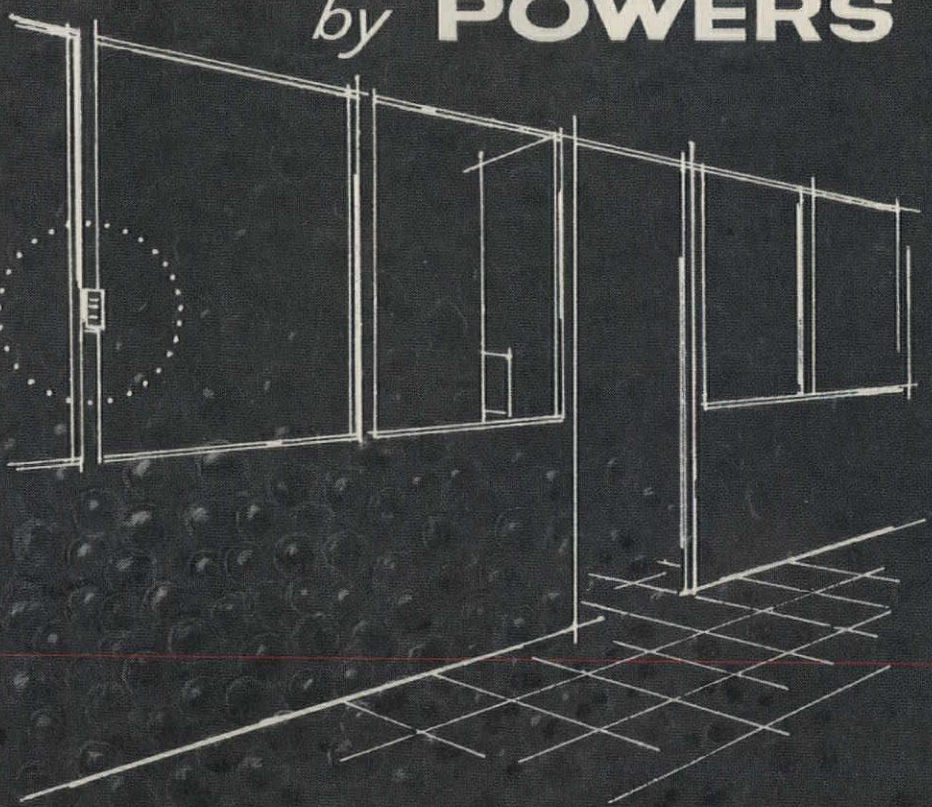
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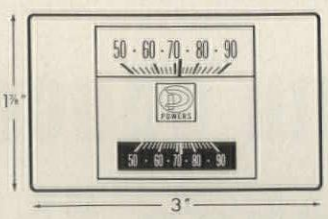
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65-124

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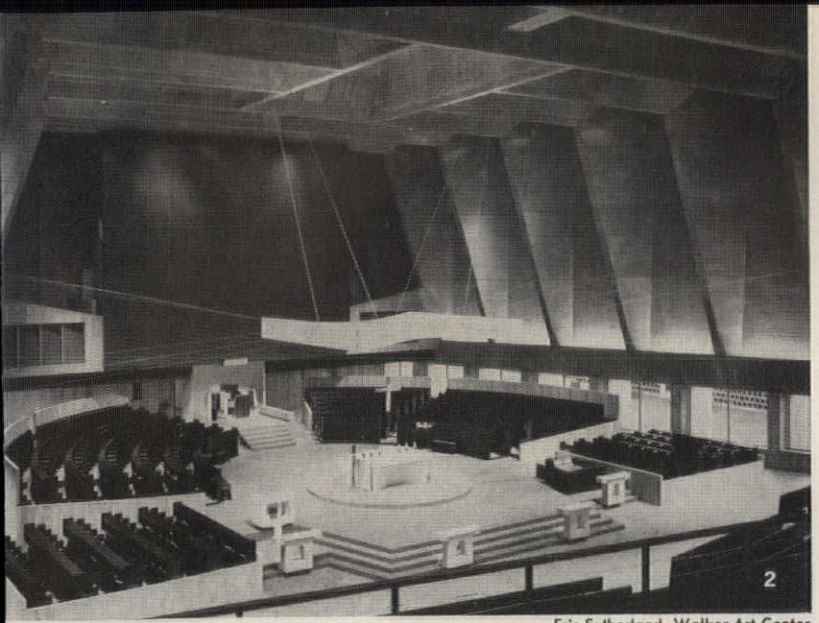
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Lee Hanley, St. John's Abbey

New dimensions in POZZOLITH concrete at St. John's Abbey

St. John's Abbey, St. John's University, Collegeville, Minnesota. Design: Marcel Breuer. Project Architect: Hamilton Smith. Structural Engineers: Weisenfeld, Hayward and Leon. Structural Consultant on Theory: Pier Luigi Nervi. Coordinators for Owners: Traynor and Hermanson, Architects. Project Coordinator: Val Michelson. Contractor: McGough Construction Co. Construction Superintendent: Ted Hoffmeyer. POZZOLITH Concrete: St. Cloud Ready-Mix Concrete Co.



Eric Sutherland, Walker Art Center



1 strength and durability

The reinforced concrete bell banner is a huge plane, only 2½ feet thick at its base, that cantilevers upward 112 feet from supporting parabolic cross vaults.

POZZOLITH provided greater compressive strength, greater bond-to-steel strength, more durable finish, while it reduced drying shrinkage and prevented cold joints during placing operations.

2 surface texture

Sidewalls and roof of the Abbey church are a series of reinforced concrete folds, untreated and unadorned. The folds enclose a volume of more than a million cubic feet. Maximum interior clear height is over 65 feet, overall width is 165 feet.

POZZOLITH contributed to the workability and cohesiveness of the mix to help create the distinctive architectural finish which is a faithful reproduction of the sharp corners and surface characteristics of the wood form boards.

3 plasticity and placeability

The north facade of the Abbey church is a self-supporting geometric tracery consisting of 540 cast-in-place concrete hexagons.

POZZOLITH increased plasticity and workability with a minimum of water in the mix, and produced a weather-resistant surface.

For complete details on *all* the beneficial qualities of POZZOLITH in architectural concrete, please call your local Master Builders office. *THE MASTER BUILDERS COMPANY, CLEVELAND 18, OHIO.*

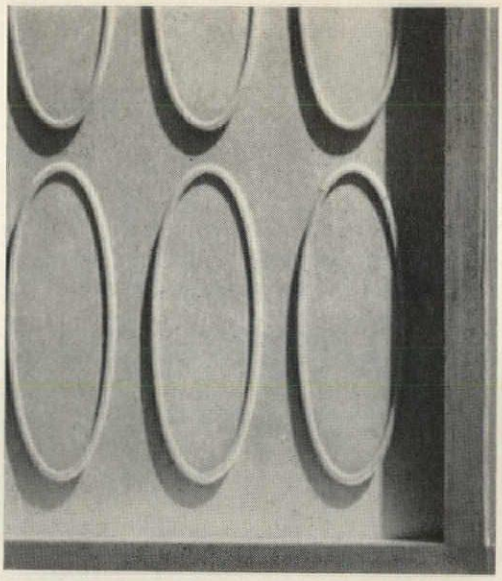
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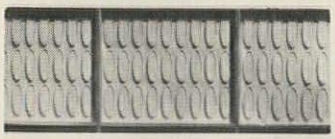


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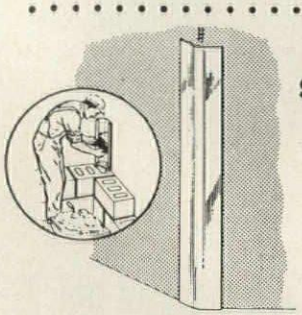
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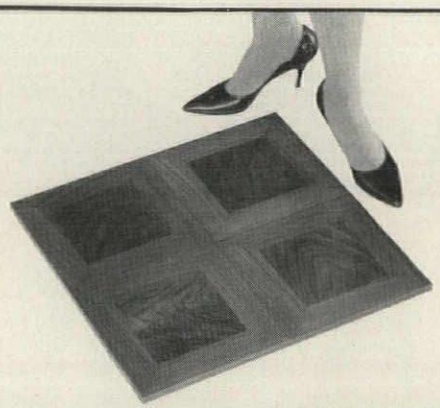
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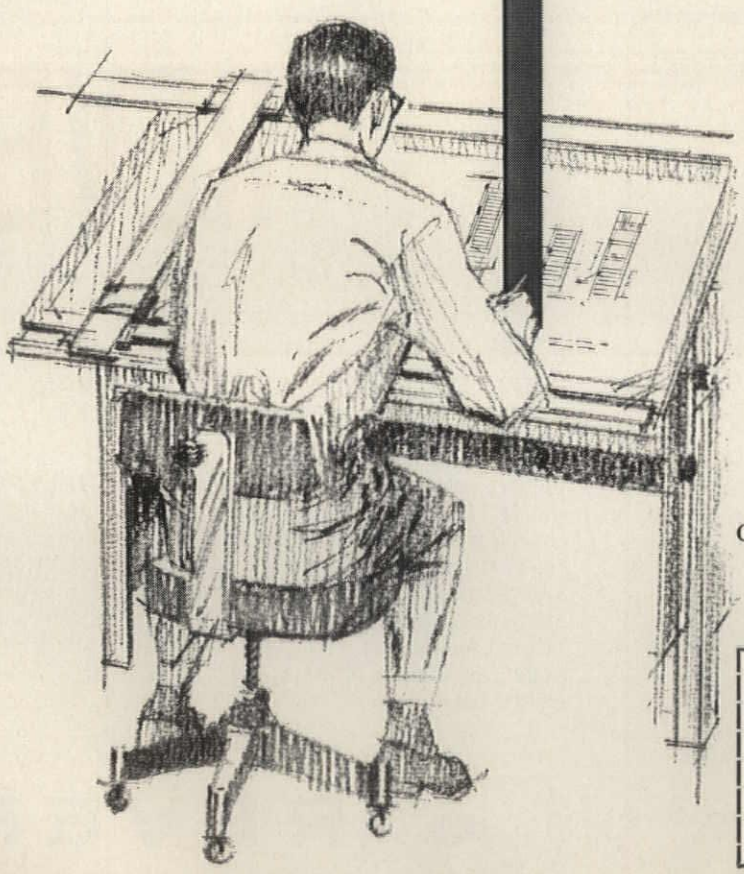
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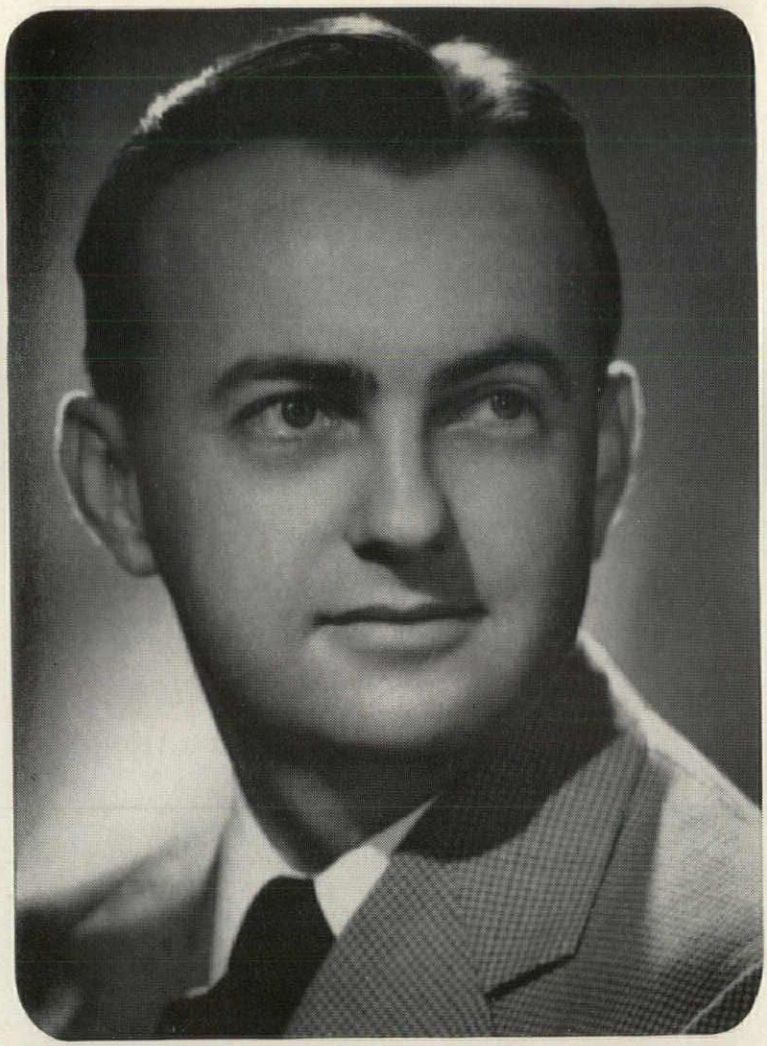
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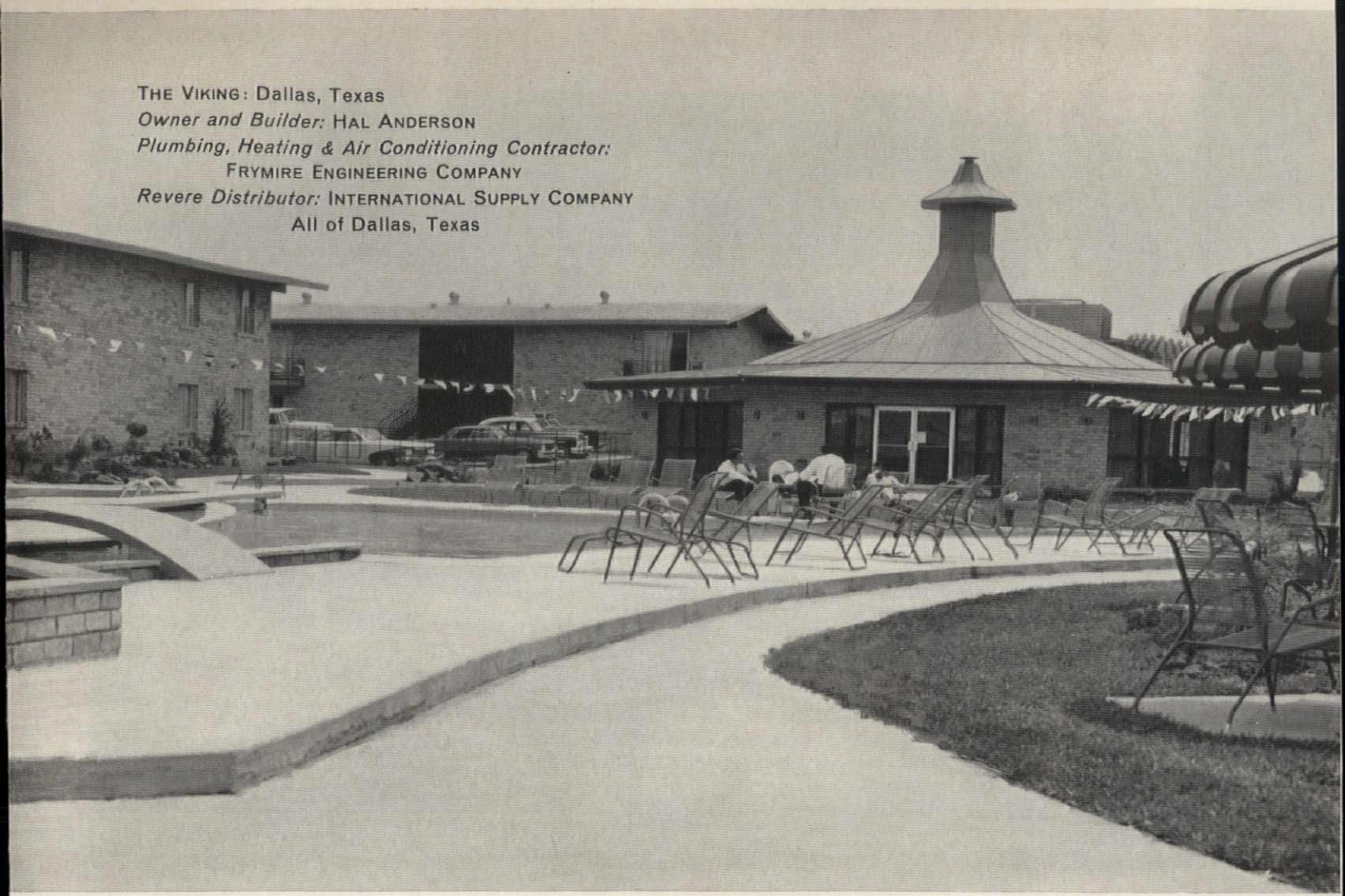
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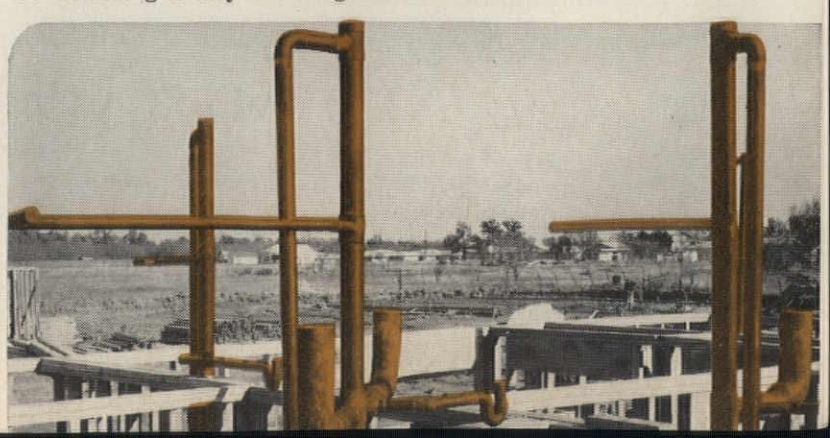
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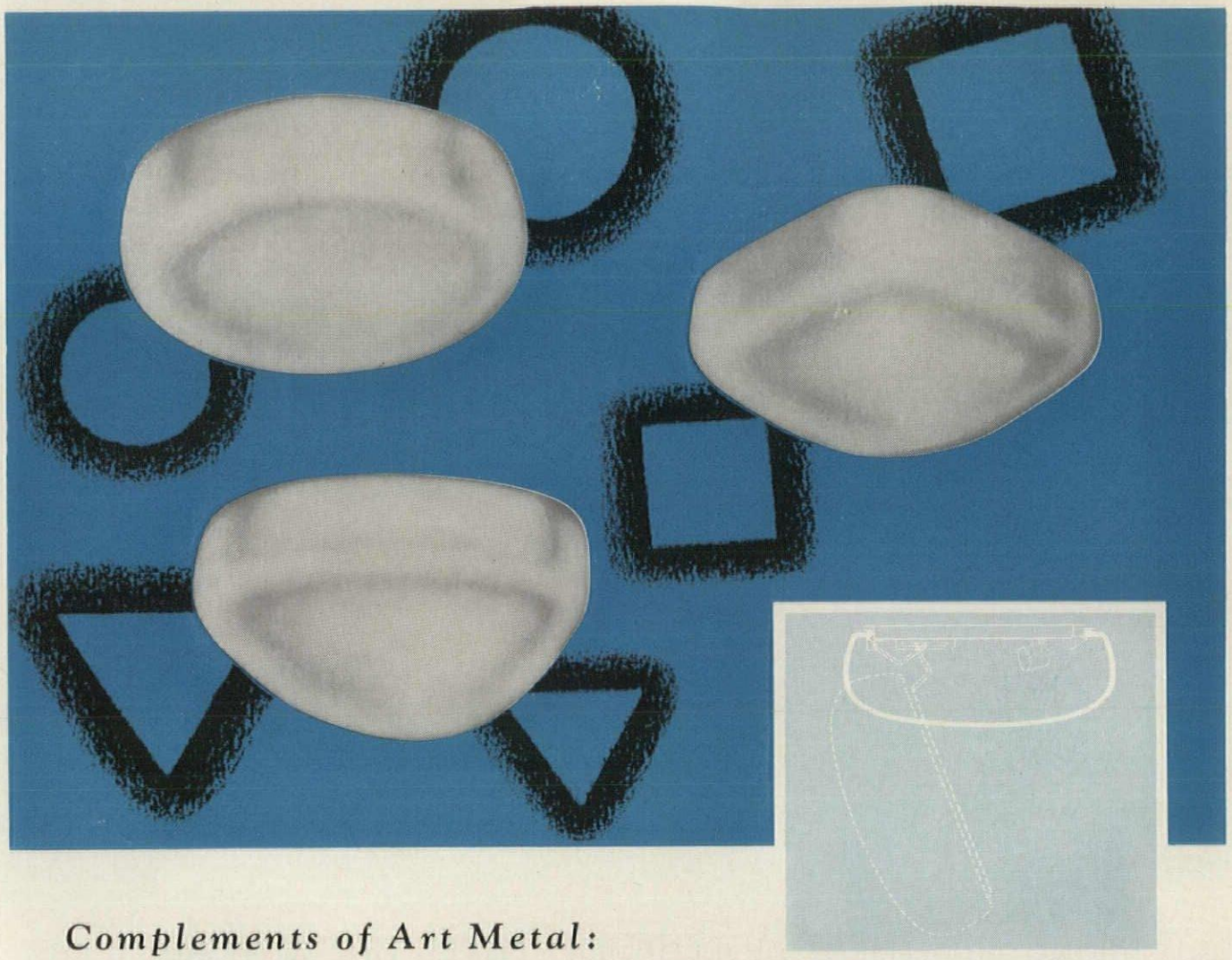
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SQ.	DEPTH
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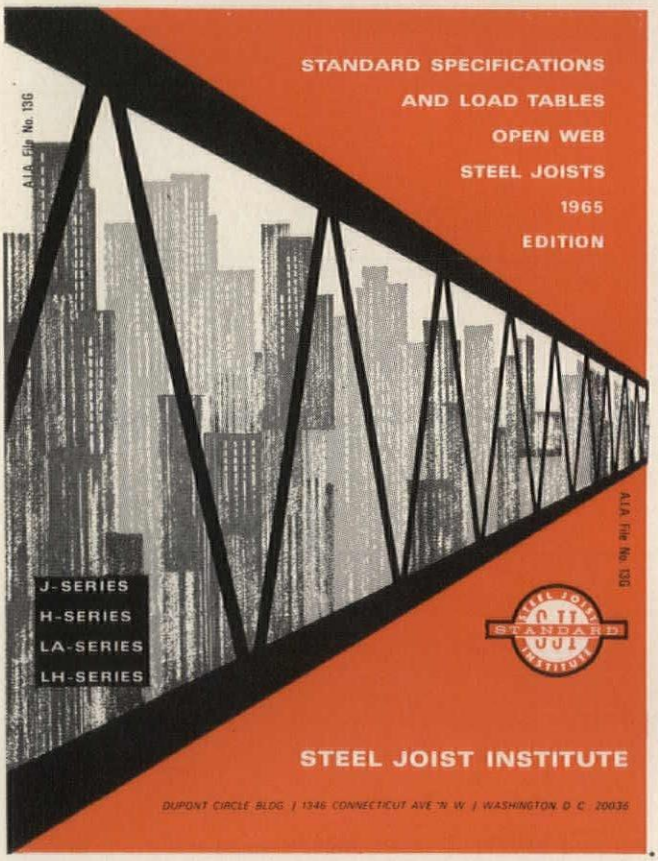
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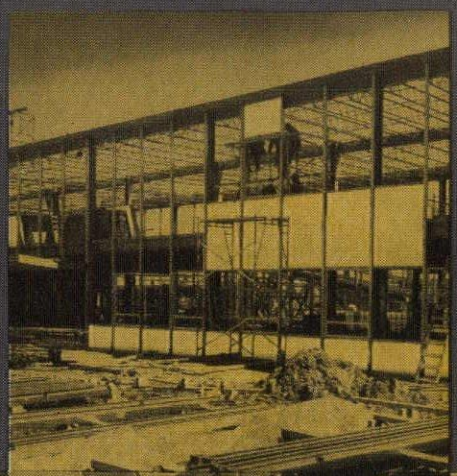
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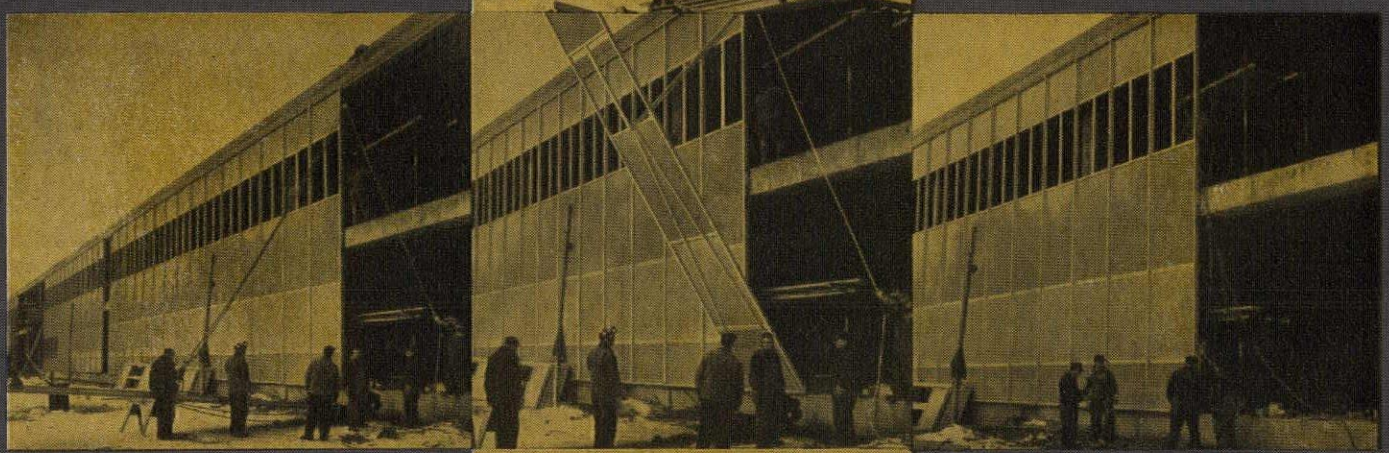
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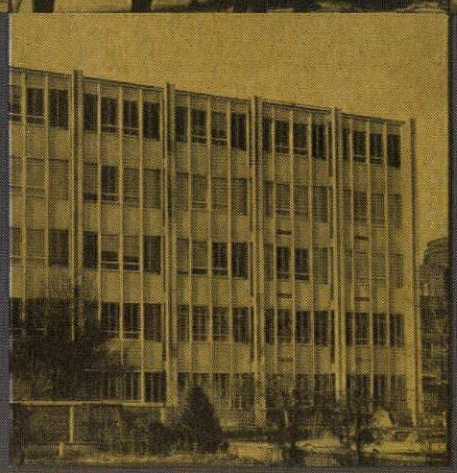
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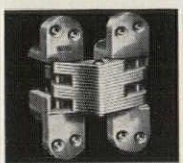
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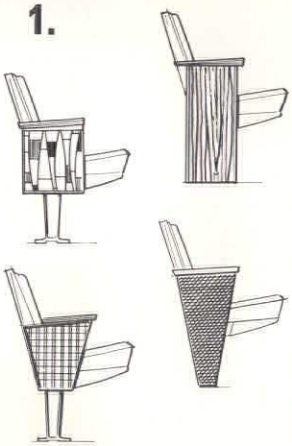
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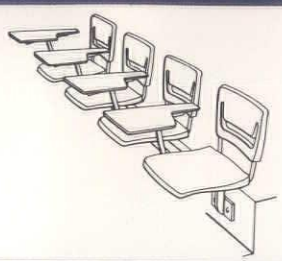




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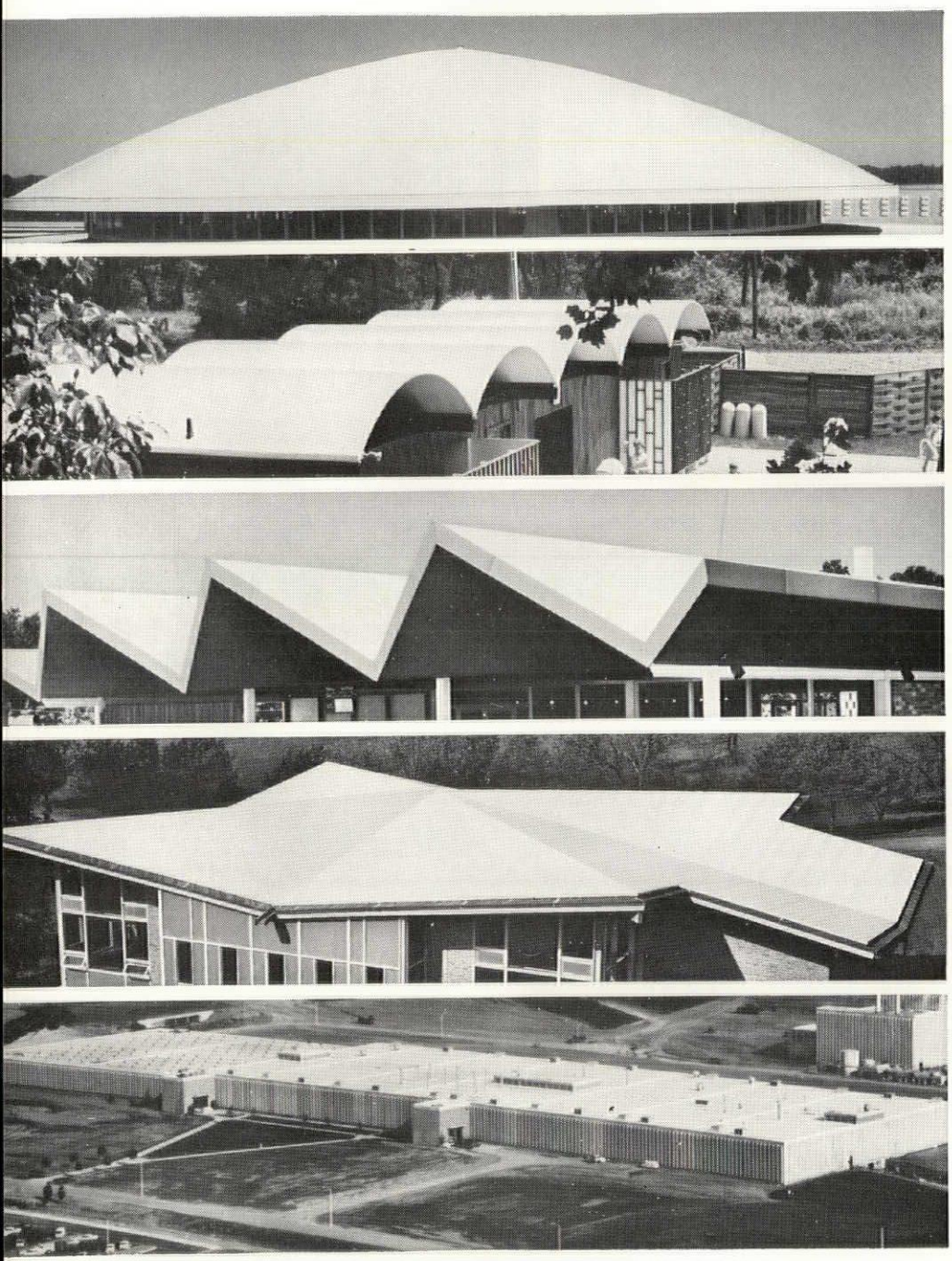


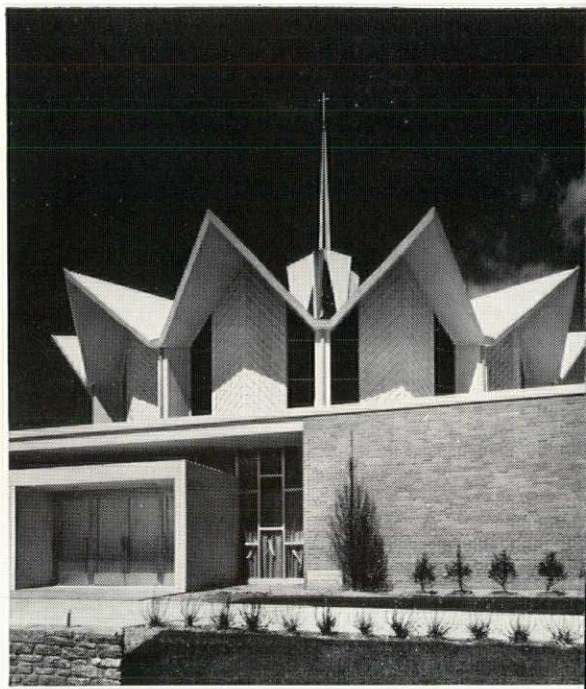


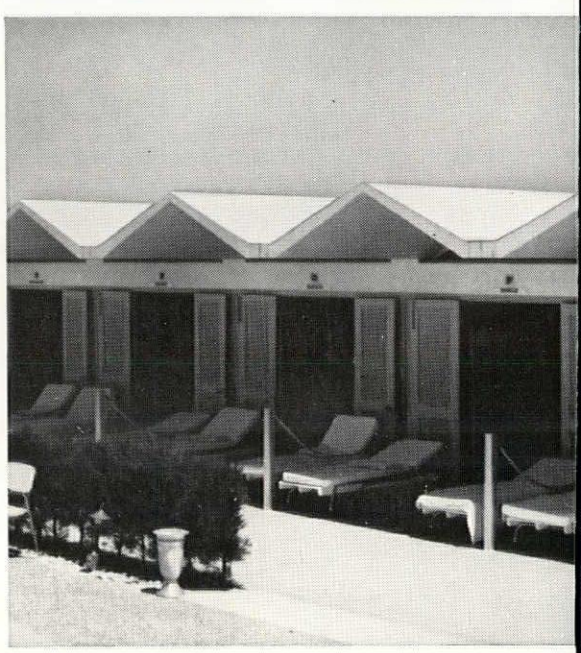
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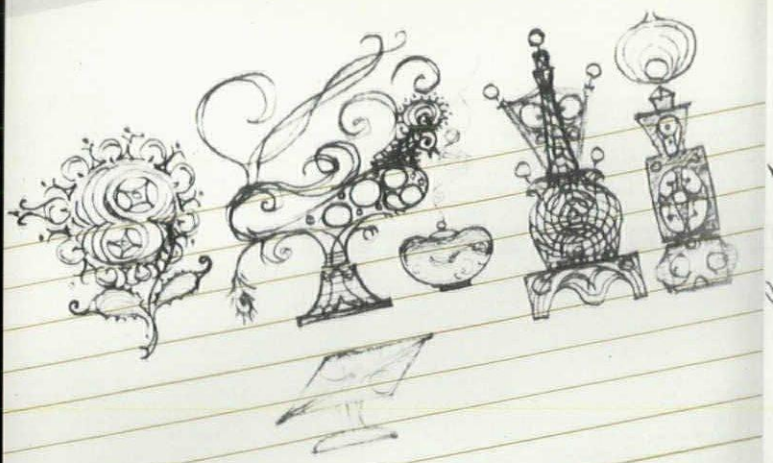
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"The works of Rudolph, Corbu, and Kahn are very forceful statements, but it takes a master to carry them off. I think we're seeing a lot of impositions and juxtapositions of their ideas thrown together by people who aren't sure how to combine them. They seem to think complication is going to make their designs more beautiful."

TYPICAL JURY REACTION TO MANY OF THE ENTRIES IN THIS YEAR'S DESIGN AWARDS PROGRAM



SC
12 83 Library
Stage
Art Room
Bookcase Center
Library
Music Room
Lib. Accounts Hall ?
Auto Common Bookcase
470
Fabric Use
Health
SC Others
602 135
500
56
458 332
142
95
435 PR LW
583
Dorm
248
276 Auction
247 Dorm
136 Town et. al
489 Sc Lab Home Ec Women's Chem
196 Law Library
580 Well by LC
274 Modern Straight
250
478 Prospect Lib. Scholl
127A · 177 · 470 · 26 · 437 · 300 · 26
463 82 · 275 · 107 ·
434 · 468 · 289 · 135 · 500 · 56 · 332 · 142
· 256 · 127B · 252 · 207 · 282 · 290 ·
20 · 377 - 388 354 ·
· 307 · 226 · 398 · 91 · 375
Hotels · 105
Homes 25 356 344 84
Large State Urban Plan
Scale of Urban Multi. purpose
Multiple home bedrooms
Civic Conservation
Homes Condos Rd. ***
Cluster Apts Mod ***
Division Modern 2 **
Small School **
High Rise
Res. Towers
Water St
New Realm Exhibition Communication

This year's jury questioned the advisability of including houses and urban design projects as admissible categories in the P/A Design Awards Program. These two categories, which are at opposite extremes in terms of size, made the jury uneasy for completely different reasons.

The design of an individual house, the jury felt, is ceasing to be a valid architectural problem because housing in the future will be of a high density type and an isolated "private palace" no longer has any real social significance.

This is undoubtedly true. Yet as long as architects are being commissioned to design houses, houses will be designed. In practical terms, then, houses still are—and will be, for some time to come—an architectural problem preoccupying a large section of the profession. Therefore it would not be correct, it seems to me, to ignore houses either in the P/A Design Awards Program or in the regular issues of the magazine.

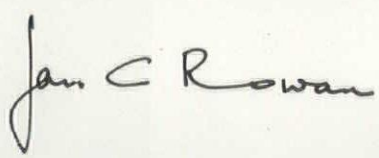
Most keenly involved in the design of houses are the younger practitioners. Perhaps this is the key to the problem, because a budding—and therefore commission-less—architect can easily fall into a trap that a more experienced architect—and a busier one—would avoid. The trap is that when a house is the only commission an architect has, he tends to treat it as a major design project and overwork it. What many architects really do when they design a house is not to design a house at all but a miniature version of some hypothetical building for which they never got a commission. Such a venting of frustrations, combined with frantic attempts at proving to oneself and to the world that one does have design talent, results in strained, overcomplicated, often ridiculous concoctions that can hardly be called houses at all. This is, I think, what the jury felt when it viewed and rejected the 148 house submissions.

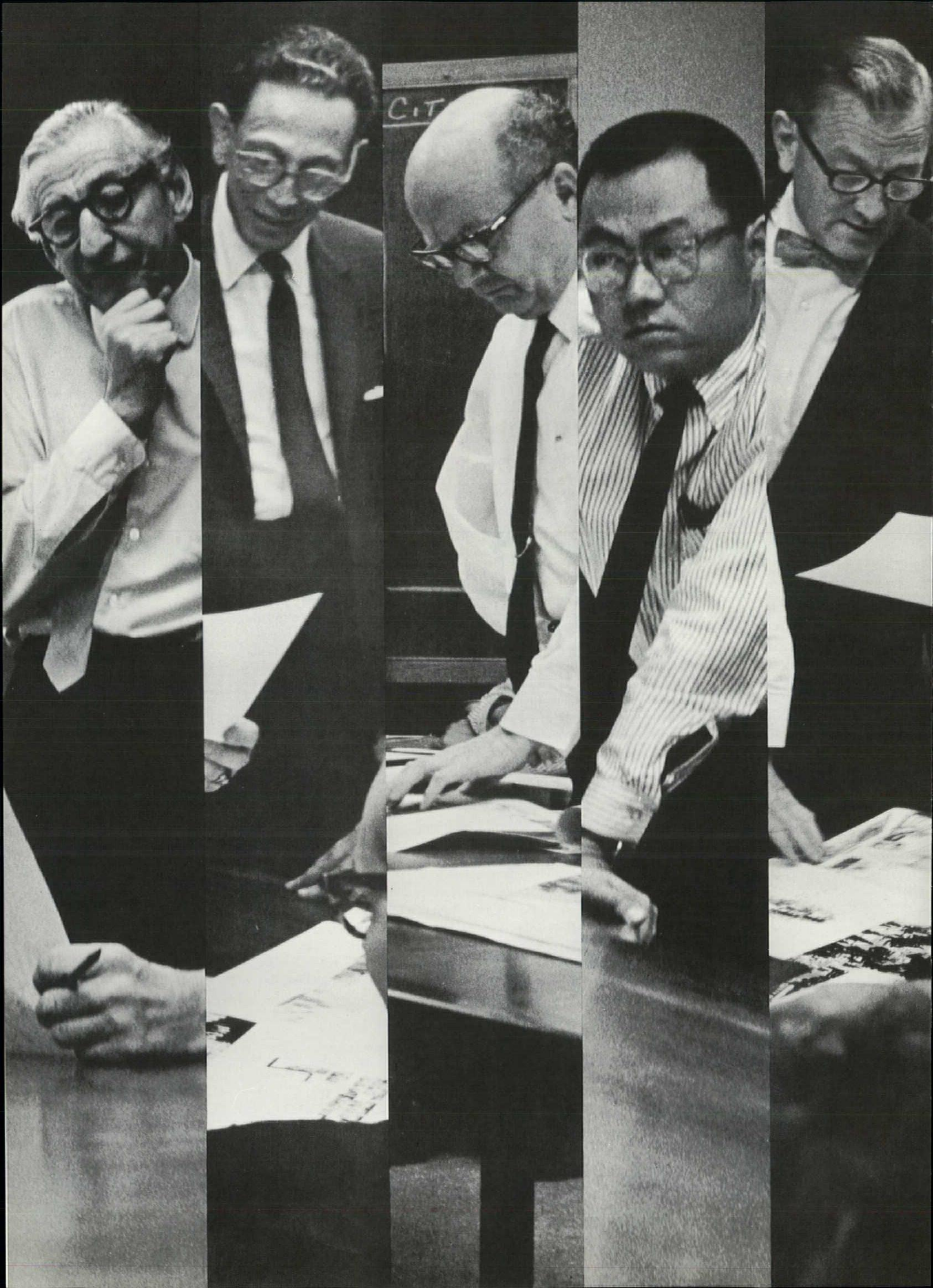
About the other category, urban design, the complaint of the jury was that it is not possible to evaluate large-scale town-planning projects in the short time available for each scheme.

I agree with the jury that it is not possible to analyze in a few minutes the practicality and desirability of a proposal that involves complex problems extending well beyond the merely physical aspects. Yet I doubt it would be wise to drop the urban design category entirely. I feel that in many cases a judgment can be made, although necessarily a superficial one, since it can deal only with a part of the problem—the over-all concept and the three-dimensional results.

All judgments, on any subject, are superficial to some extent. It is only the degree of superficiality (or degree of thoroughness, if one looks at this problem from the opposite direction) that differs in any sort of evaluation. As long as those who submit urban design projects realize that a jury can judge merely parts of their proposals, certain aspects only, there is, I think, some value in continuing with this category.

More details on how these two building categories fared in this year's Design Awards Program can be found on the following pages in the Introduction and the Jury Discussion. ■





P/A TWELFTH ANNUAL DESIGN AWARDS

One day this past fall, five men gathered in a windowless conference room just a few feet away from the glassy distractions of New York's Park Avenue to examine the 643 projects submitted in P/A's 12th Annual Design Awards Program. After two full days of intense examination and discussion, they had decided to honor the 16 projects presented on the following pages.

The jury for this year's competition (*from left to right, facing page*) included: Serge Chermayeff, architect, educator, and critic, of New Haven (elected chairman of the jury); Edgar Kaufmann, Jr., of New York, one-time Director of the Architecture and Industrial Design Department at the Museum of Modern Art and writer and critic in both of these fields; Paul Hayden Kirk of Kirk, Wallace & McKinley, Architects, Seattle; Gyo Obata, of Hellmuth, Obata & Kassabaum, Architects, St. Louis; and Lev Zetlin, Structural Engineer, of New York, who has collaborated with many distinguished architects.

As in previous years, the mountain of entries was divided into 10 major building-type categories, and further subdivided by type where possible, so that the jury could examine projects of similar scale and purpose simultaneously. As usual in recent years, there were entries in every category except Defense.

The number of entries and the number of premiated projects were both roughly the average for the past few years. The number of categories in which projects were honored—six—was also typical. For the sixth consecutive year, there were no awards in the Industry category; the category of Commerce, although it included 68 submissions, received no honors. Urban Design, also well represented, received no honors for the second consecutive year. This year's jury, however, did not reject all of the Urban Design entries, but rather questioned its competence to judge projects of such scale and intricacy. The judges' comments on this subject are included in the Jury Discussion, concluding this Awards presentation.

Over half of the premiated projects were in the Residential and Educational categories, which also accounted for over half of the submissions. These category designations, however, obscure the fact that half of the honored projects were of a single type: small-scaled multiple housing. Three of the five premiated Education projects and five of the six Residential projects fall into this group.

More remarkable is the fact that, for the first time in the 12-year history of the Program, there are no single-family houses among the winners. The jury not only rejected all 148 houses submitted (almost one-quarter of the total submissions) but questioned whether the single-family house could be considered a genuine architectural problem (see "Jury Discussion").

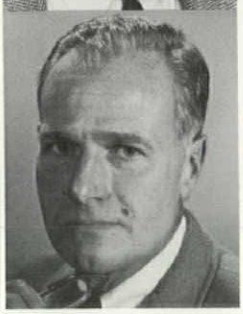
The general reactions of Design Award juries vary from year to year in a somewhat cyclic pattern. This year's jury was not happy with the over-all state of architecture—either inside or outside the jury room. Their reservations recalled the jury meeting of four years ago, when Walter Netsch and others warned of the threat of architectural "chaos" in the proliferation of showy forms. The following year, however, the jury was "cheered" by an apparent "turning away from chaoticism." Two years ago chaos had ceased to be a threat; Paul Rudolph heralded an emerging train of thought when he spoke against "putting things in packages" and urged that the various "parts" of the building be made "manifest." Last year, Peter Collins saw evidence of a "period of stability" in the entries, but Vincent Kling detected a dangerous undercurrent of "nervousness." This year that same nervousness emerged as a new threat in the eyes of the jury.

This jury was concerned over a tendency to express inconsequential—even nonexistent—elements in the building form. They attributed the fragmented forms that appeared throughout the entries to the poorly assimilated influence of Kahn, Rudolph, and other "originators."

What this jury looked for was simplicity and directness. Striking forms and bold articulation were looked upon with skepticism. One juror, Paul Kirk, even said: "To hell with Architecture; let's start just building buildings."







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FIRST DESIGN AWARD

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Housing Complex for the University of Rhode Island

PROJECT: Stage II of the Housing Complex for University of Rhode Island, Kingston, Rhode Island.

PROGRAM REQUIREMENTS: Three residence halls to accommodate approximately 500 undergraduate students; a commons building with dining facilities for 1600 students. Working budget for the residence halls, $4000 per student; for commons building, $700 per student—including site development.

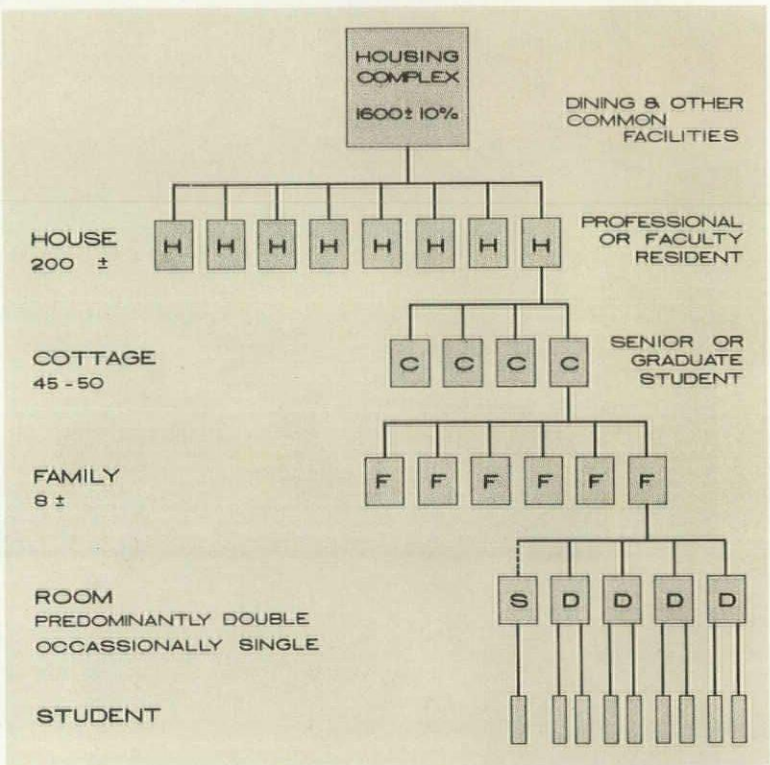
SITE: Central portion of a sloping 14-acre site on which three residence halls are already under construction. Stage II will incorporate not only additional residence halls and the commons building but also important site work—the diversion of an existing stream over a rocky ravine, and conversion of an abandoned quarry into a pond. Grading is to be kept to a minimum to preserve a canopy of ash, maple, and oak trees now covering much of the site. Architects and the university envision an interrelated group of buildings embracing a park.

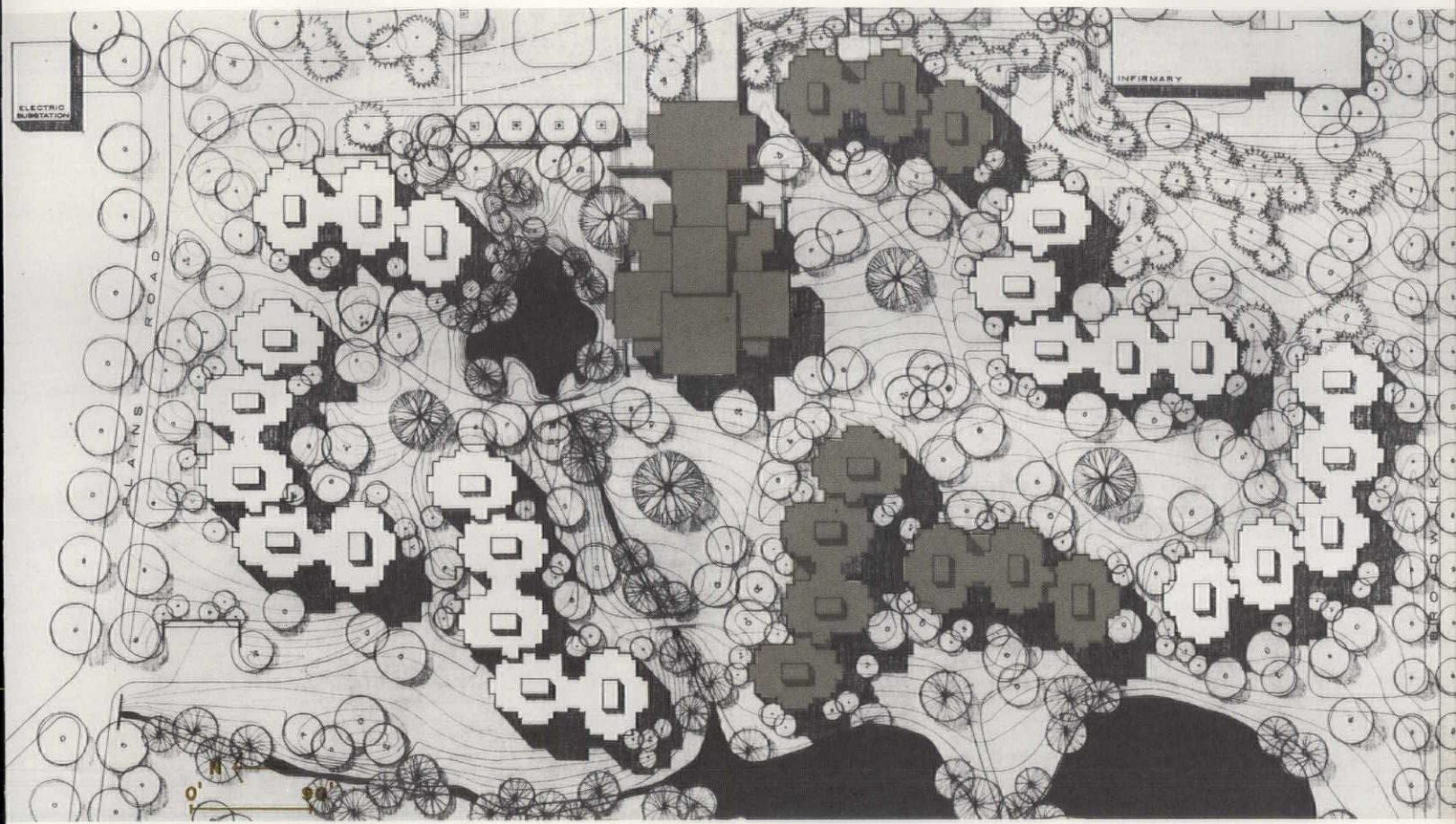
DESIGN SOLUTION: A series of closely interwoven, gradually expanding environments (*diagram, right*): first, the private, personal space for one or two students; second, the suite of rooms for a "family" of about eight students; third, the "cottage" for 45–50 students, tying together several "family" groups; fourth, the residence hall for 200 students, an assembly of several "cottages"; and finally, the larger complex encompassing all common facilities. In accordance with the University's strong belief that the architecture of the housing complex "must add to the educational process of the student," cottages, for example, are designed to be governed and staffed by student members.

Main entrance to the housing complex is from the academic area to the east, past the commons building, where a series of stairs and terraces lead into the center of the complex. Although visitors may enter the residence halls directly from the perimeter streets, students will approach their housing quarters from the park within.

CONSTRUCTION AND MATERIALS: Reinforced concrete was chosen for its low sound transmission, to meet code requirements, and to minimize maintenance costs. The concrete is to be combined with a terra-cotta weather surface. Both relate well to the traditional granite and brick used on the campus.

JURY COMMENTS: "Unquestionably the finest of the many cluster schemes submitted—beautifully related to its site . . . Has captured an informality that is particularly commendable . . . A residential rather than institutional solution . . . Volume of interior expressed on the exterior without affectation . . . Simple, direct plan . . . Design of individual 'cottage' module is excellent and is at the same time susceptible of growth."



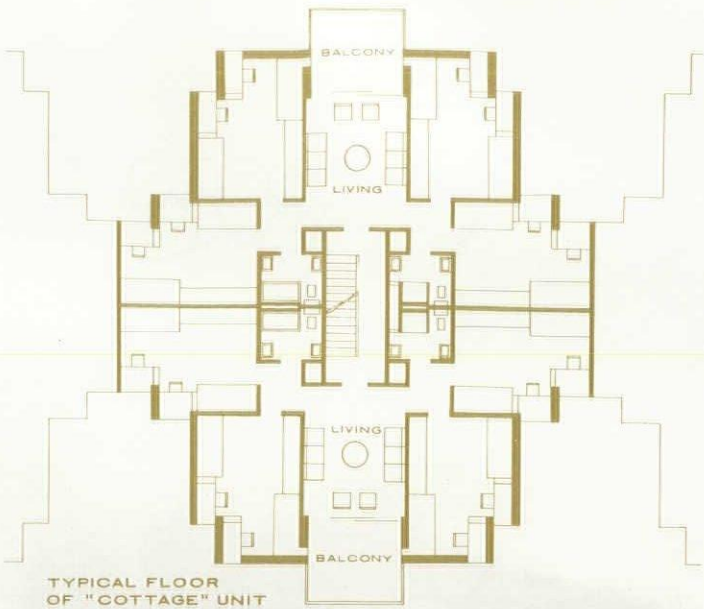

ELECTRIC SUBSTATION
INFIRMARY
PLAINS ROAD
BROADWAY
0'
20'



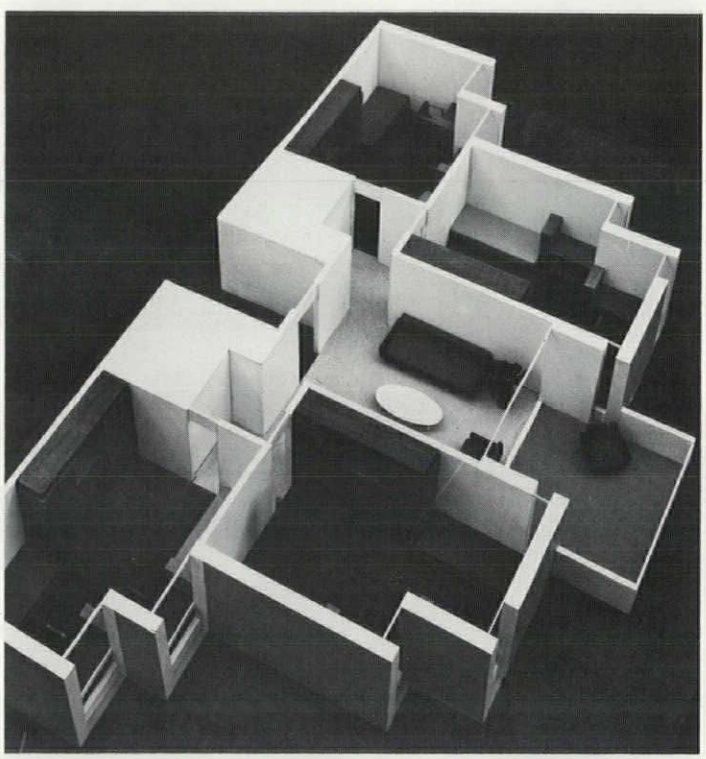
In planning the residence halls, maximum privacy within the double room was the first consideration. Consequently, the student desks are designed as individual study carrels and their strong architectural articulation has determined the configuration of the rooms. In contrast to the usual 200-sq-ft double room, the typical double room here measures only 160 sq ft. This saving of square footage, plus saving of the usual corridor space, has been put toward a living room shared by a "family" of eight students. Thus the immediate student environment is a double room combined with an adjacent living room and two residential-size baths—an arrangement equally practical for the housing of married students and their families during summer sessions.

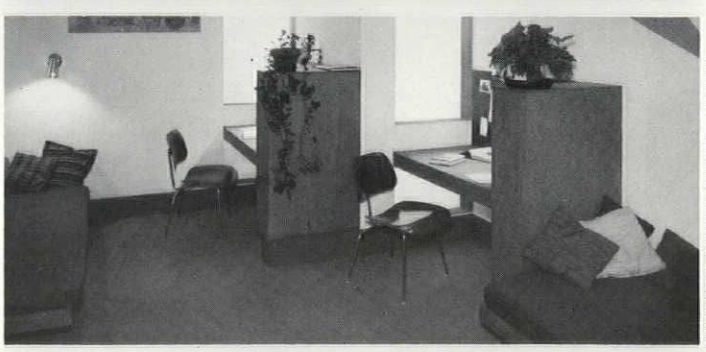
Six of these "families" of students are brought together in a four-story cottage —the three upper floors accommodating two families per floor, the ground floor containing common facilities.

Three, four, or five cottages are then connected side-by-side to form residence halls, each supervised by a resident faculty member. At the ground floor, where the nonresidential facilities are located, horizontal circulation from one "cottage" to the next is uninterrupted. Concrete walls enclosing these common rooms form, in effect, pedestals for the residential floors above. On these upper levels, the walls are precast concrete panels 2 in. thick, with 6" x 4" vertical ribs 4 ft o.c., and integrally cast window sub-frames. Floors are flat slabs. Weather surfaces of the upper floors are sheathed with 12" x 12" x 4" dark-red bricks with a slight glaze. All interior concrete surfaces will be painted, and all floors, except in service areas, will be carpeted. A central vacuum cleaner system will be installed and conduit for telephones are to be provided for each student desk. Campus steam is to be converted to hot water, and circulated along the baseboards of each room. Wardrobes and desks will be permanently fixed, but the beds are to have slide mechanisms that will allow them to be adjusted for sitting and sleeping. Furniture in the living rooms will be movable, as will be the furniture in the ground-floor lounges.



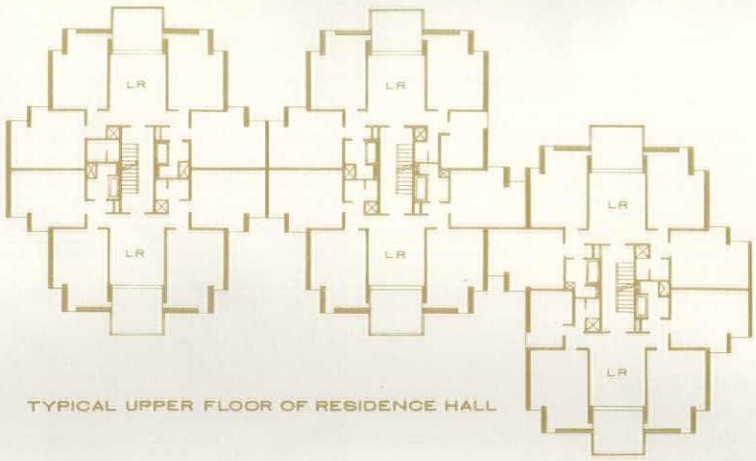
TYPICAL FLOOR
OF "COTTAGE" UNIT



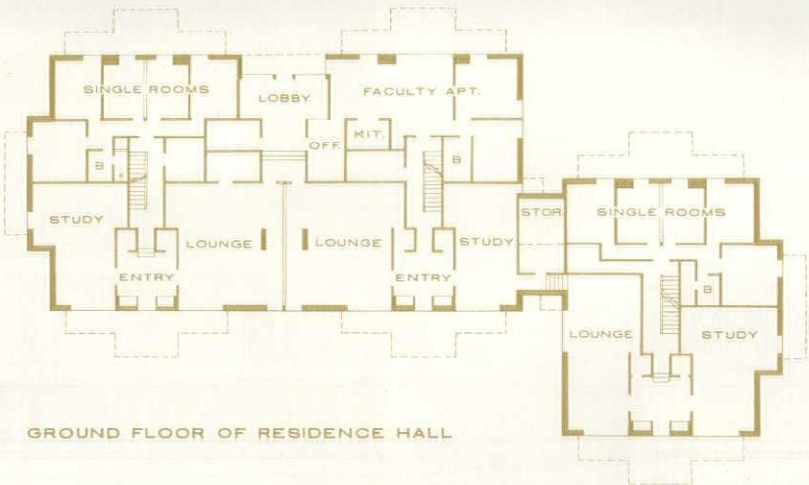


MODEL ROOM PHOTOS: ROBERT D. HARVEY



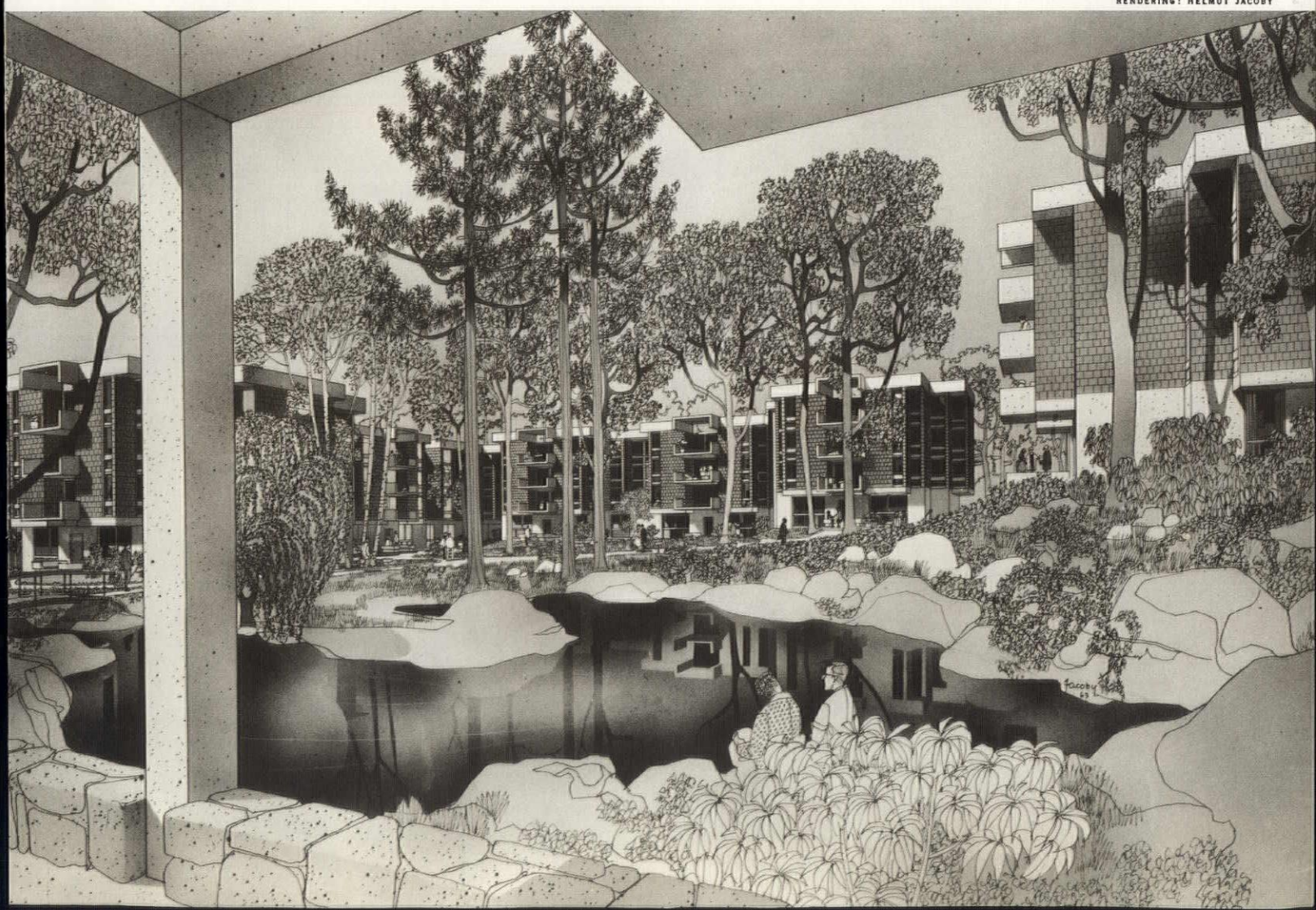


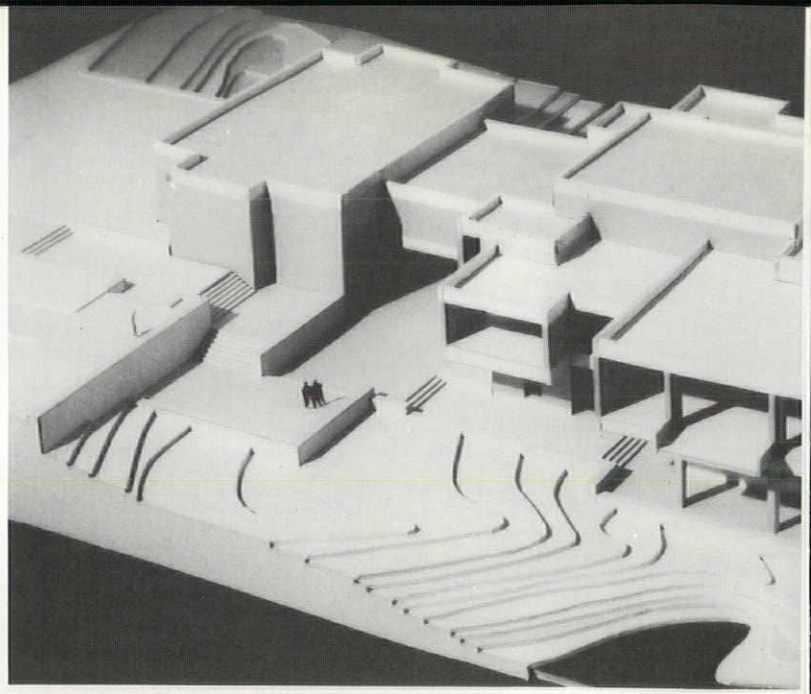
TYPICAL UPPER FLOOR OF RESIDENCE HALL



GROUND FLOOR OF RESIDENCE HALL

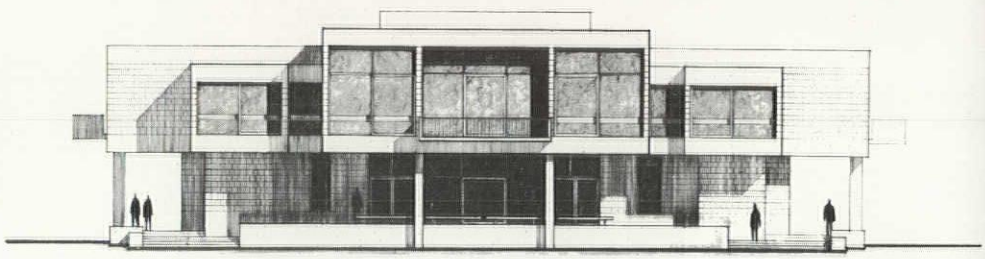
RENDERING: HELMUT JACOBY





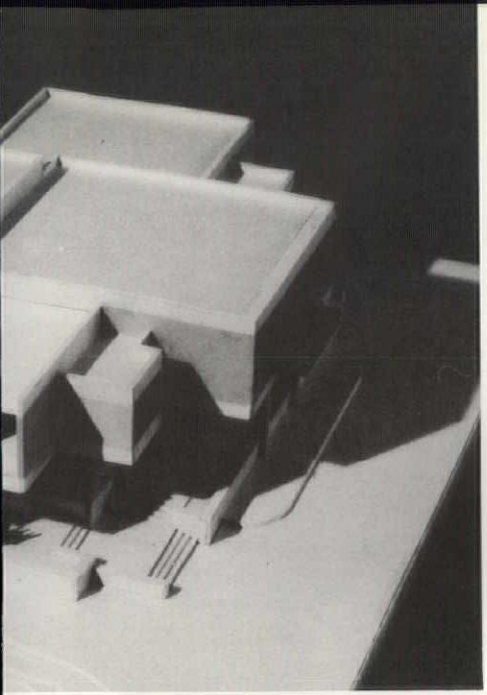
The commons building contains dining and other facilities for the entire 1600-student housing complex. Its central, pivotal position makes it the dominant element in the composition and the focus of student life. At the same time, however, the architects were careful not to let this building dominate or overshadow the residence halls but rather to use it as the common bond unifying all of the structures. The same materials as those used for the residence halls—concrete and bricks—are repeated here, to further the architectural continuity.

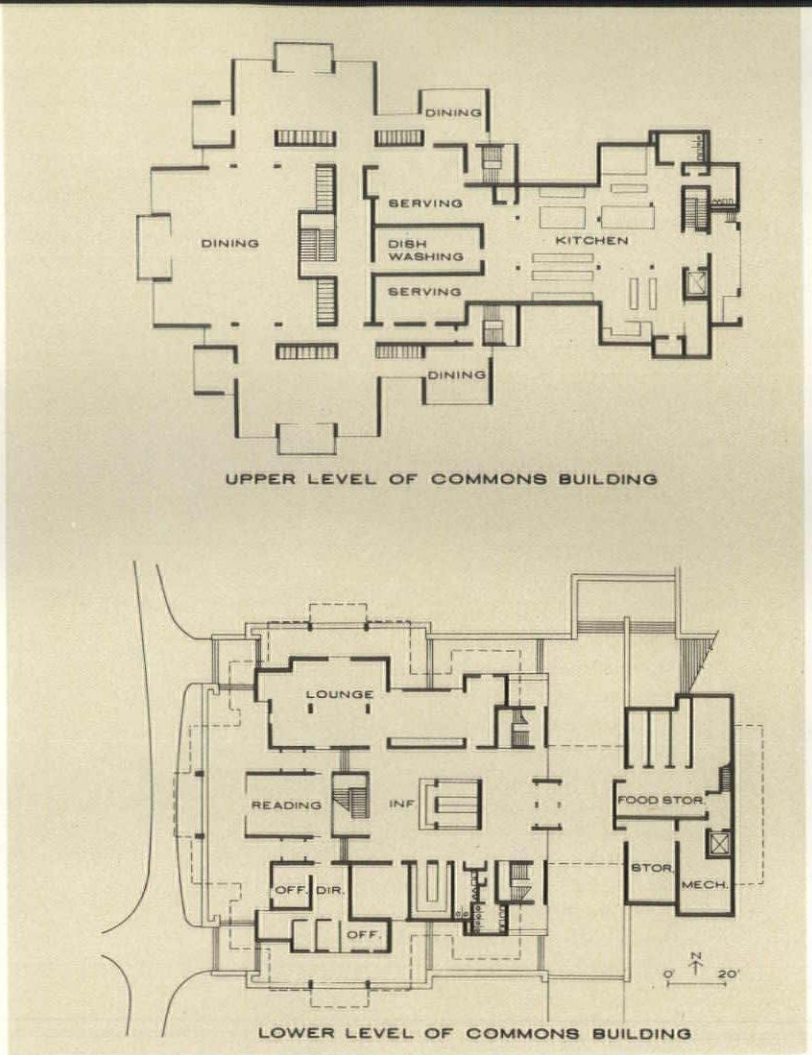
Major dining facilities are on the upper level. Spaces are designed to adapt to groups of various sizes: the biggest of these will accommodate all of the 280 students of the largest of the residence halls. Smaller groups can be served in rooms adjacent to the service and kitchen areas. And, since the housing complex will be used by married students and their families during summer conferences, balconies are provided for outdoor dining. The kitchen is also located on the upper level, since it has access to grade for servicing at the building's east end.





The lower level contains the common facilities, which are centered around the student-operated information desk, post office and laundry/dry-cleaning pick-up station. Nearby are offices for the director of the housing complex, a seminar room for student meetings, an office for student government, a reading room, and an informal lounge-snack area.





RENDERING: HELMUT JACOBY











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JOSEPH MAYBANK III,
PROJECT TEAM

PROJECT: Bennington Regional High School, for Union District School Board (Barton Jenks, President), Bennington, Vermont.

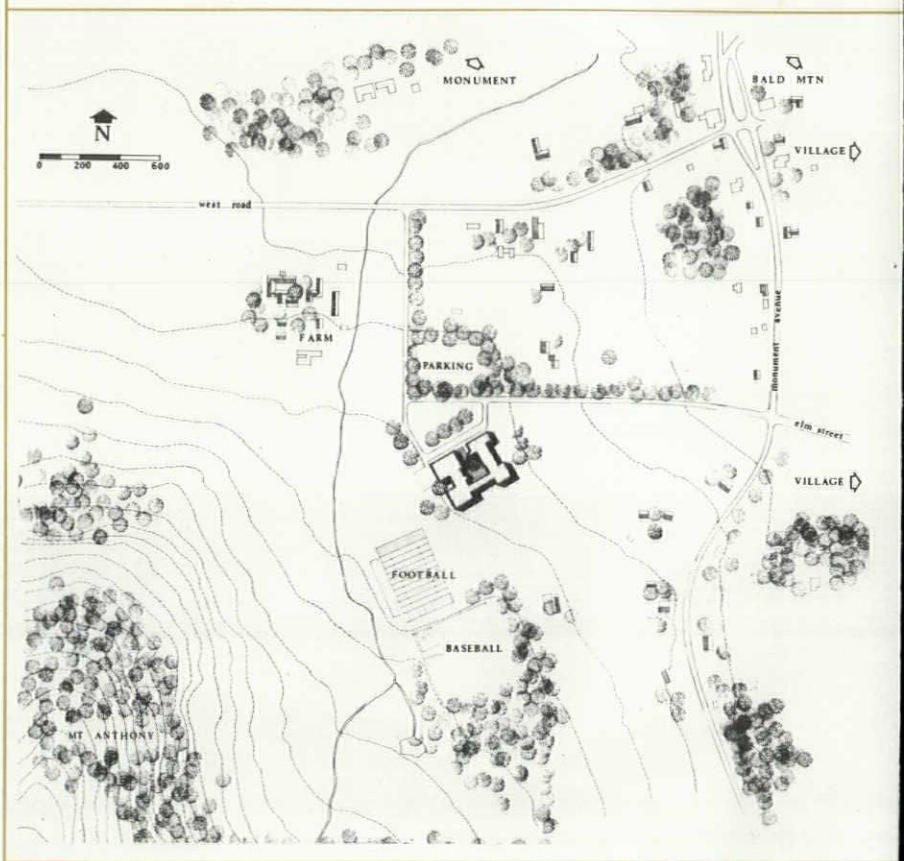
SITE: The school will stand on the slope of a hill overlooking the village of Bennington and the Civil War monument.

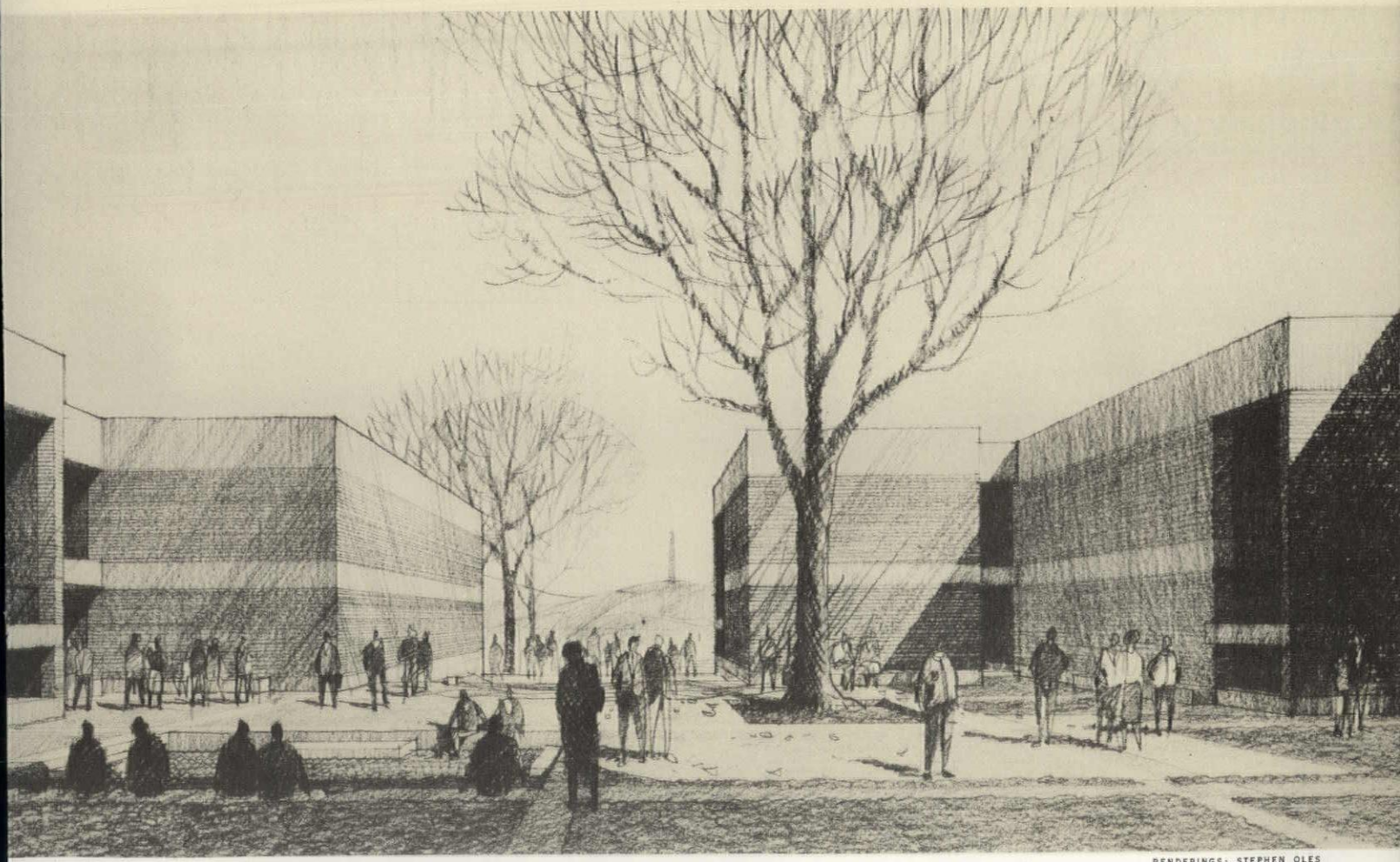
PROGRAM REQUIREMENTS: A high school to serve 1000 to 1200 students from the five Vermont towns of Bennington, North Bennington, Pownal, Shaftsbury, and Woodford. The facilities were to be specifically designed to accommodate the "core-skill" curriculum. Core-skill, explain the architects, is the educational concept that advocates a closer alliance between the humanities and the more specialized scientific and vocational skills. The program also encourages a closer relationship between scientific and vocational teaching, countering the usual isolation of vocational departments.

DESIGN SOLUTION: An "instructional service center" forms the core of the building, containing not only the library but also various associated functions such as an audio-visual center, a health and guidance center, administration, special teacher and clerical staff facilities, conference rooms and study rooms. This center also includes facilities for preparing the various educational and audio-visual materials.

CONSTRUCTION AND MATERIAL: The structure will be poured-in-place reinforced concrete, utilizing a coffered grid slab that incorporates lighting and various services. Extensive use is made of local brick; the exposed concrete is to be sand-blasted. Interior partitions will be concrete block; dry wall construction where optimum flexibility is desired.

JURY COMMENTS: One of the few buildings in the Awards Program that has real tranquility and repose.... Interesting space between the wings of the building.... Court put there for a definite reason.... Solid rooms used as corner anchors.... Very quiet but significant vestibule.... School on the whole underfenestrated, inner-oriented, undisturbed as a school should be.... Corridors, often a problem, are well done, no monotony.



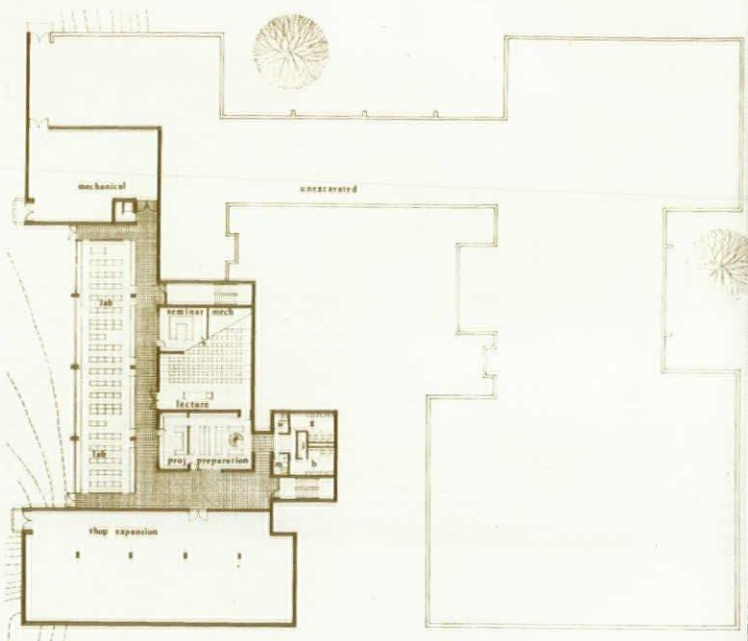


RENDERINGS: STEPHEN OLES

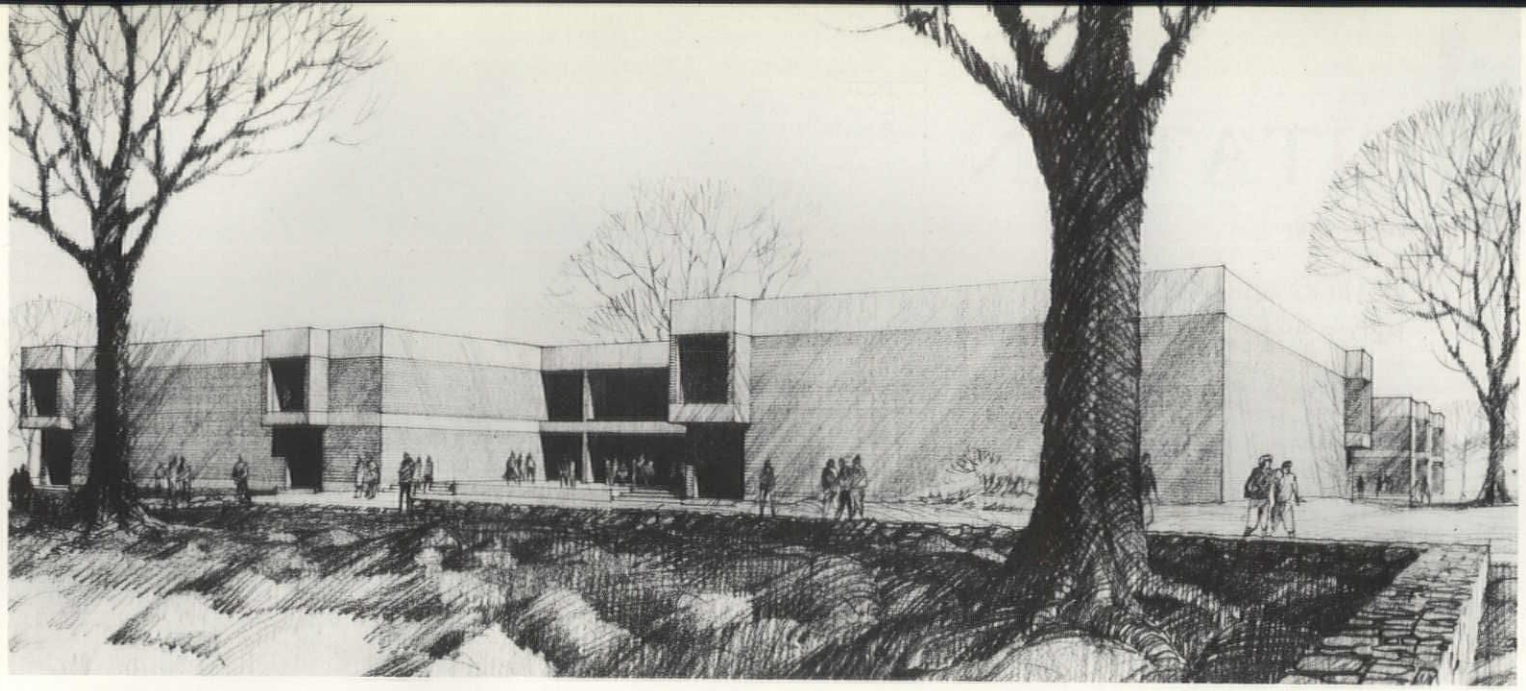
The school is disposed on three levels; entry to it is through a central courtyard at midlevel. On this level are located all of the major facilities such as the instructional service center, the auditorium, gymnasium, and shops. These major spaces occupy the corners of the U-shaped plan. Between them are general classrooms, which can be adapted to various uses and subdivided into classes of various sizes. The auditorium is designed to seat 450, but it, too, can be subdivided. A small lecture room for audio and science demonstrations, used by all of the departments, is easily accessible from the upper and lower levels.

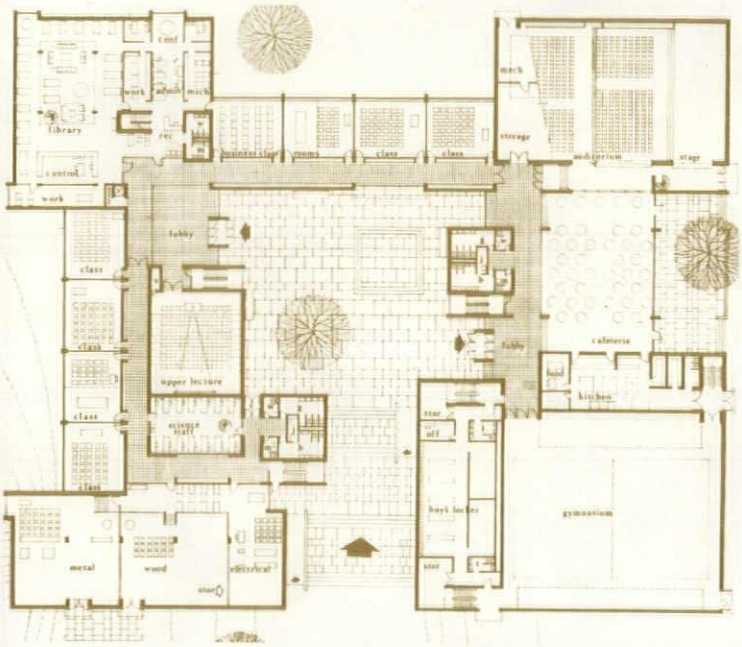
For ease of service and for fire safety, the science and vocational spaces are located on the lower floor, which has direct access to grade.

The upper level follows the pattern of the main floor, with additional classrooms and spaces serving as corner anchors.

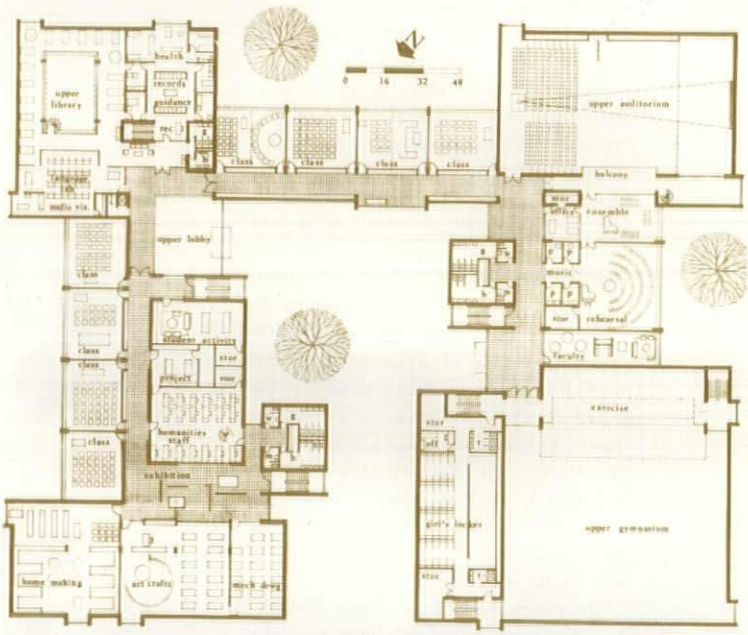


lower floor

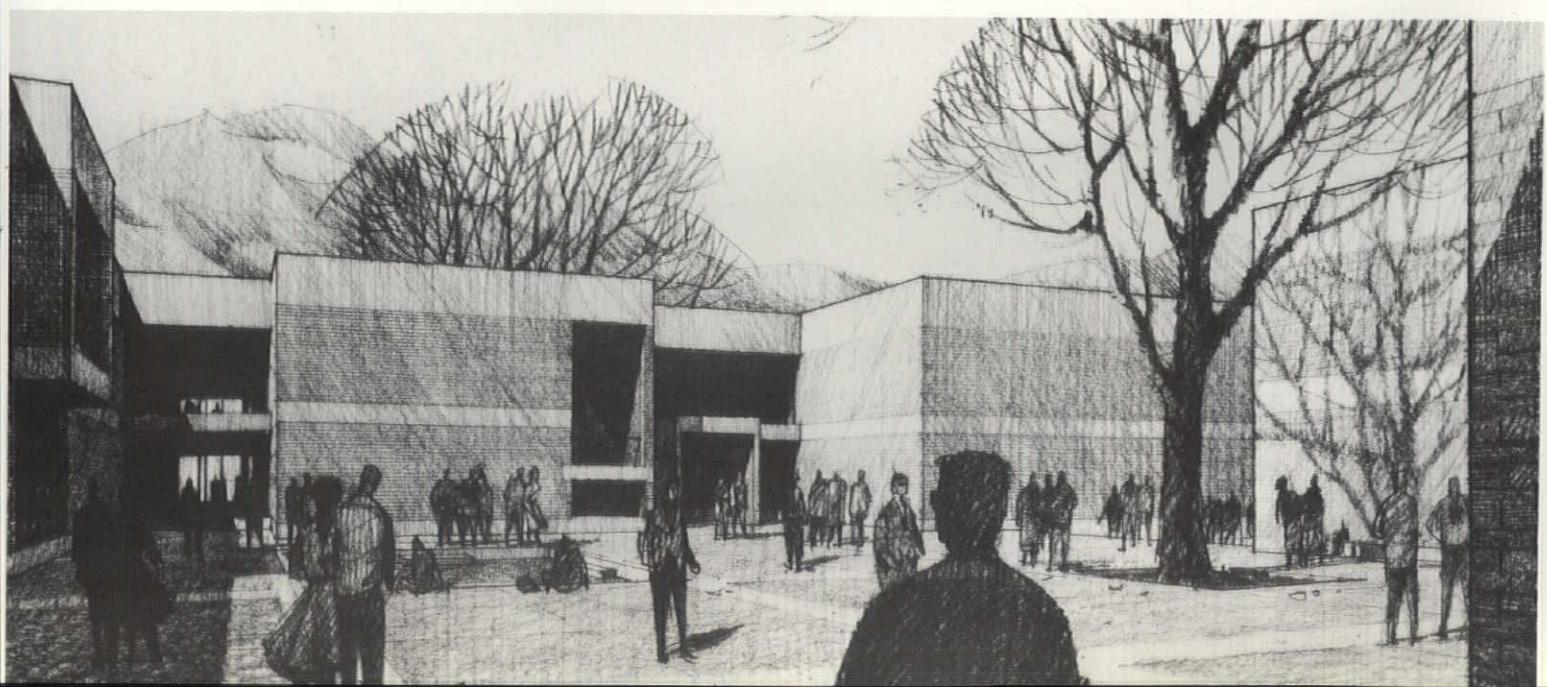




main floor



upper floor





CITATION

COLBERT *education*

CHARLES COLBERT, ARCHITECT

HELGE WESTERMANN,
SUPERVISING ASSOCIATE ARCHITECT

GUILLOT, SULLIVAN & VOGT,
MECHANICAL & ELECTRICAL
ENGINEERS

OGLE & ROSENBAUM,
STRUCTURAL ENGINEERS

PROJECT: Riverdale Country School for Girls, for the Riverdale Country School, New York, N. Y. Thomas Lovejoy, Jr., Chairman of the Board; John H. Jones, Headmaster; Marian C. Hollstein, Headmistress.

SITE: A beautifully landscaped hillside. Two Victorian mansions and an old stable have been adapted to accommodate 120 girls, grades 7–12. Prime visual attraction are the many unusual trees and a sweeping view of the Hudson.

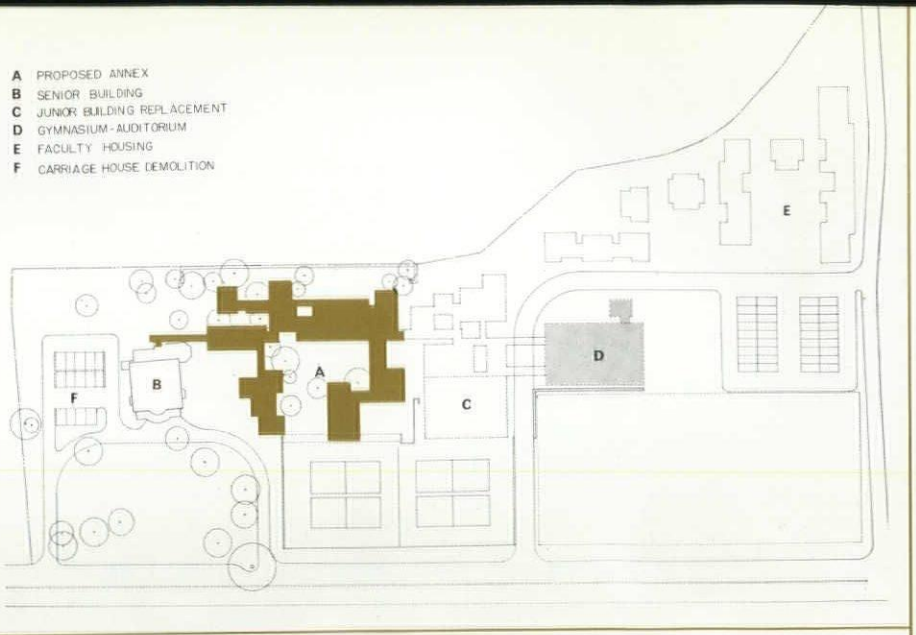
PROGRAM REQUIREMENTS: Educational Facilities for a student body, not to exceed 150. The old "Senior Building" (*see site plan*) is to be retained as symbol of the original school.

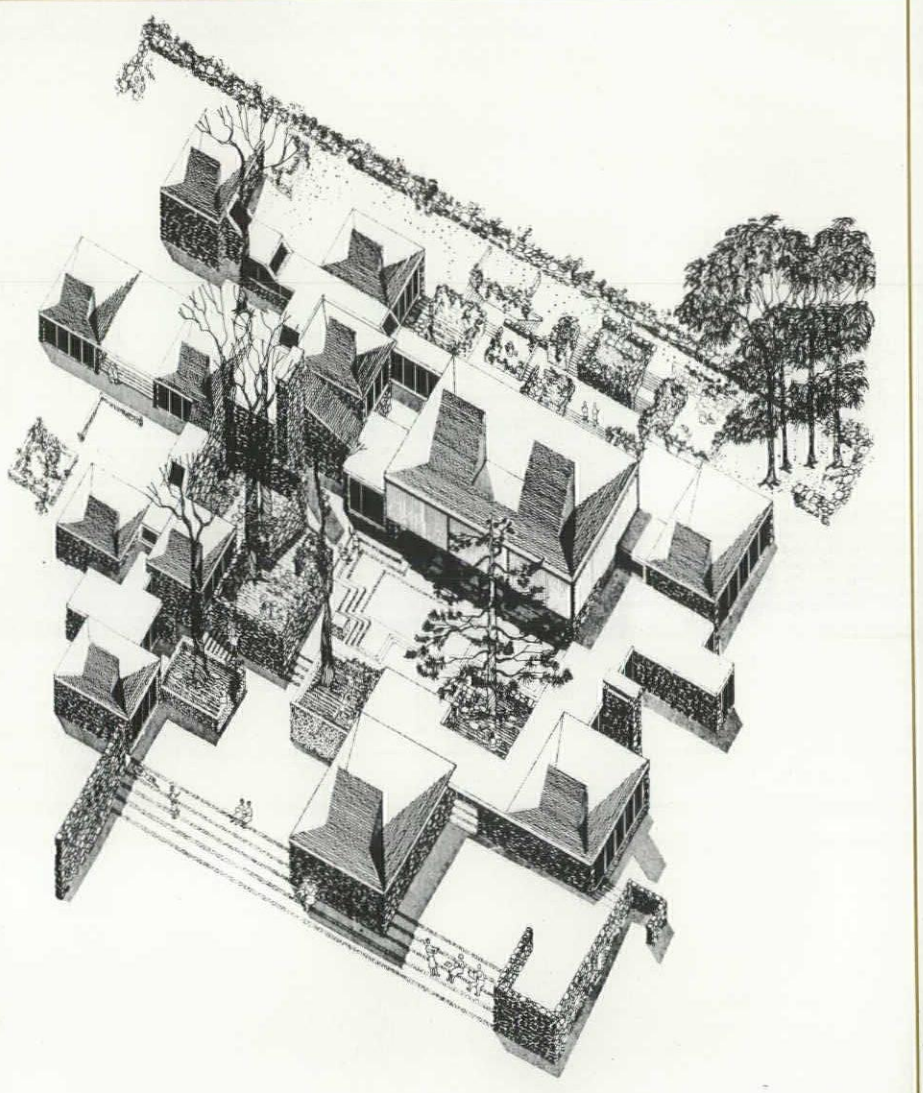
DESIGN SOLUTION: A series of building increments (A–F on site plan) to accommodate the long-range needs of the school. Location of existing trees and relationships of teaching spaces determined the random arrangement of the classroom pavilions. A sunken court—cut into the hill and surrounded by conversational nooks, classrooms, hideaways and overlooks—was conceived as the educational "commons" for many uses in all seasons.

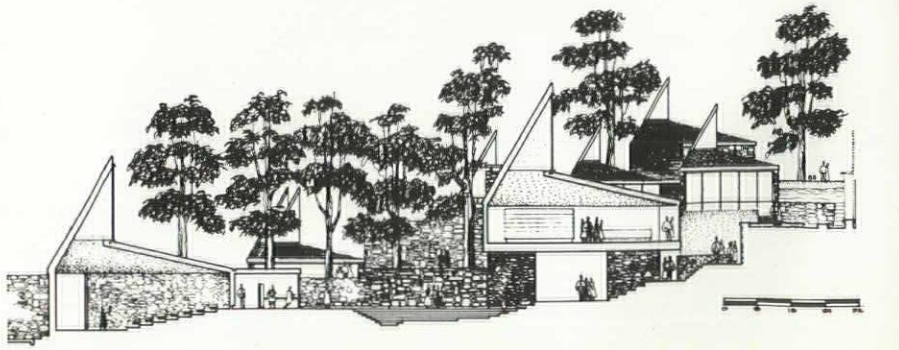
Classrooms have been oriented toward the river with large, overhead skylights to the east. Views are purposely limited —opened only at unexpected locations along the route from class to class.

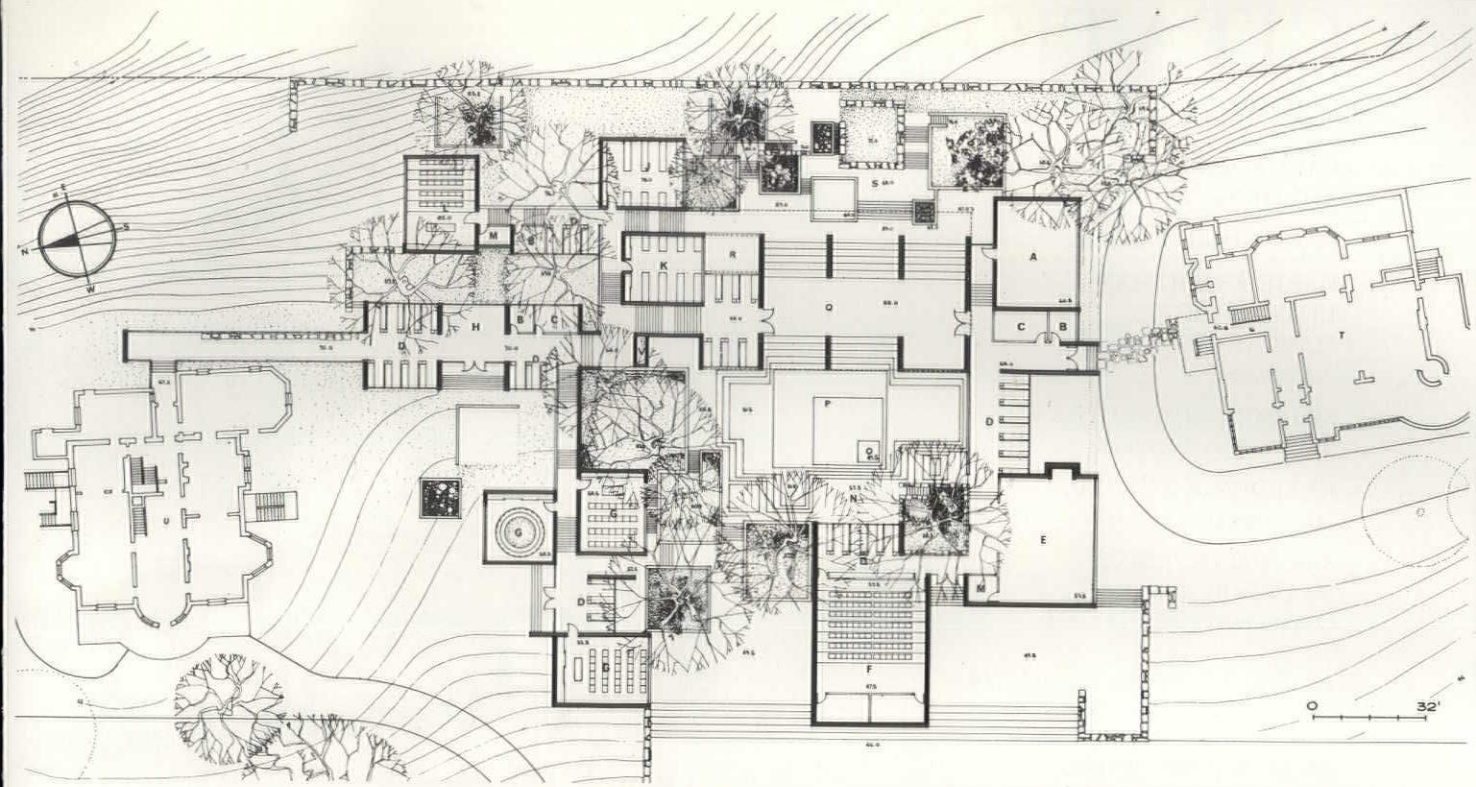
CONSTRUCTION AND MATERIALS: Side walls, originally to be of random stone found on the site, will instead be built of brick in accordance with cost factors and client's considerations. The structural framing is of reinforced concrete, using spread footings, floating slabs, and 14-in. bearing brick cavity walls. Other materials to be used are Redwood or Western Cedar for mullions, frames, fascias, and trim, slate roofs, acoustical plaster ceilings, amber glass, aluminum projected windows, exposed aggregate paving, and exposed brick.

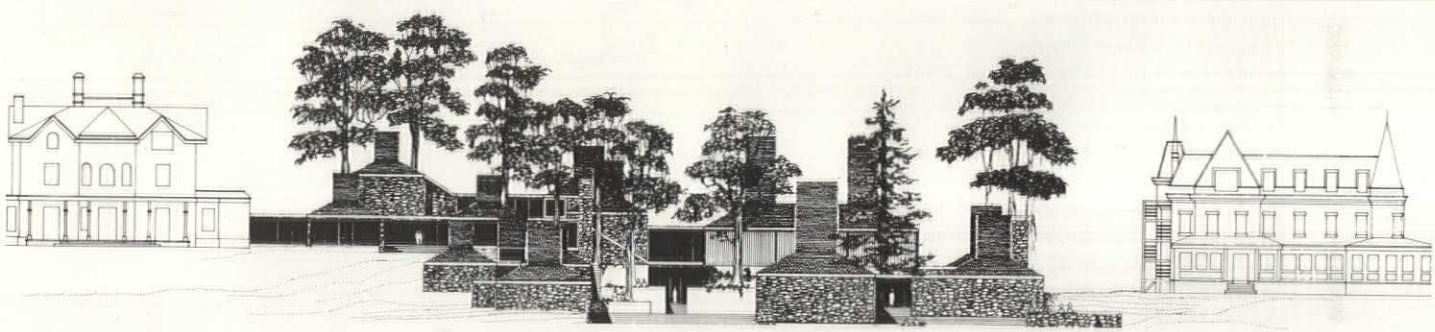
JURY COMMENTS: Tenderly set on the beautiful site.... Consistency of architecture throughout.... Roofs perhaps a bit too steeply pitched but will bring nice light into the interiors.... Delightful spaces ... one would never be bored in them.... Perfect little series of events ... a walk not only through trees, but through architecture.

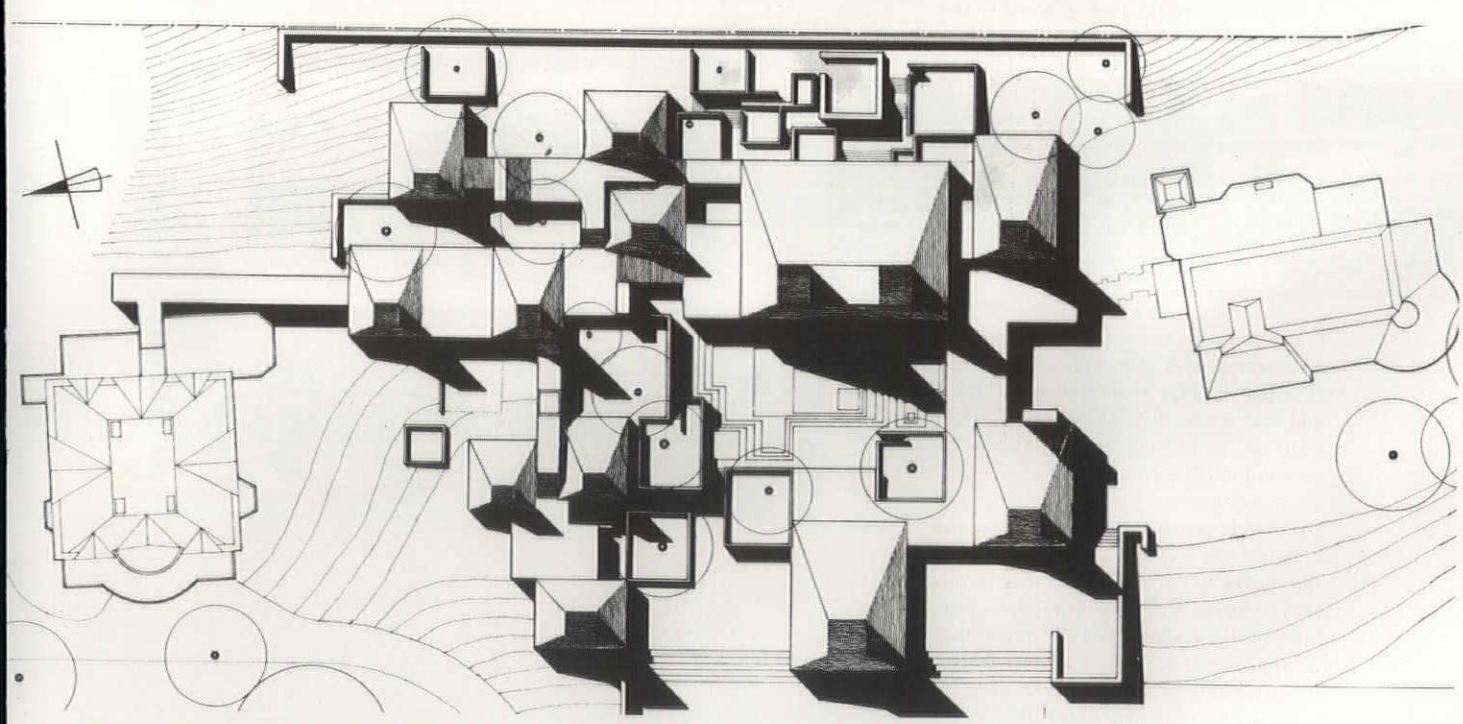


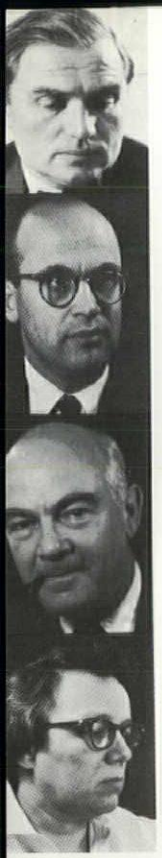





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KOCH

ERTMAN

LIPSHUTZ

ROSS

CITATION

education

CARL KOCH & ASSOCIATES, INC.,
ARCHITECTS

CARL KOCH, PRINCIPAL

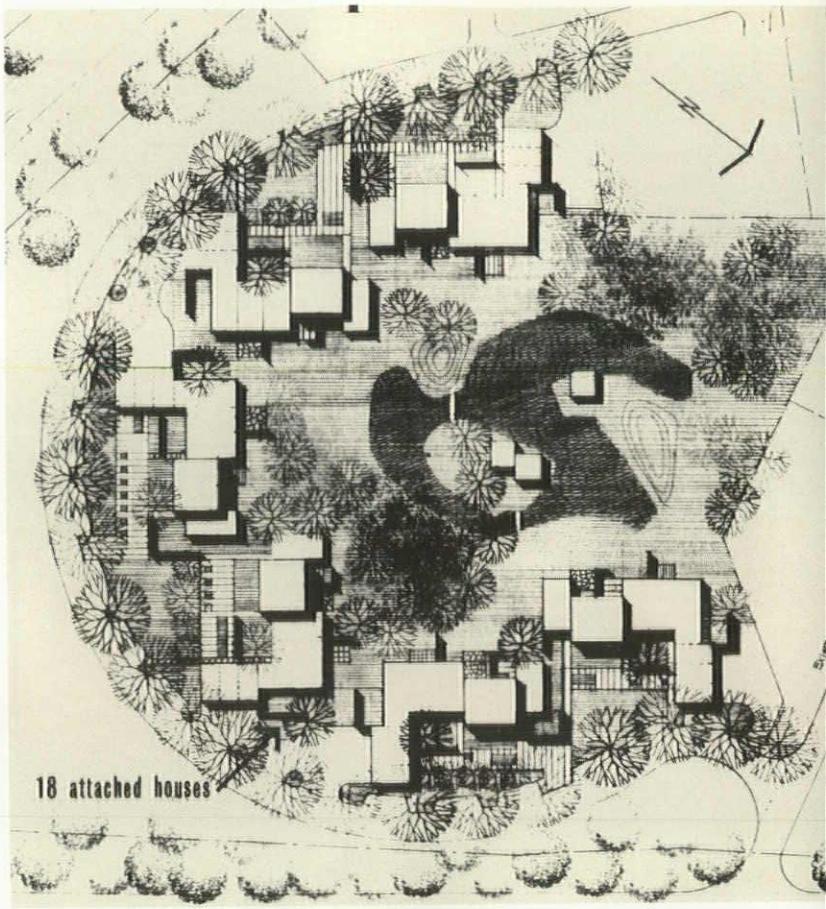
GARDNER ERTMAN,
LEON LIPSHUTZ,
MARGARET ROSS,
ASSOCIATES

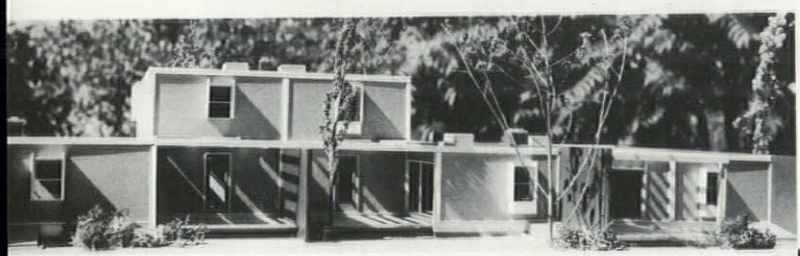
SIMPSON, GUMPERTZ & HAGER,
STRUCTURAL ENGINEERS

REARDON & TURNER,
MECHANICAL ENGINEERS

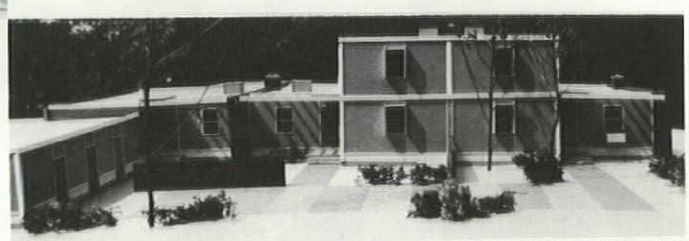
ACKERMAN, KNOX,
HAYWOOD & PAKAN,
CONSULTANTS

PROJECT: Faculty Housing for Vassar College, Poughkeepsie, New York.
SITE: Triangular, flat, and treeless property on the Vassar Campus.
PROGRAM REQUIREMENTS: Three- and four-bedroom units—eighteen to be designed for rental purposes; nine lots to be set aside for sale houses.
DESIGN SOLUTION: The eighteen rental units are to be grouped around a central landscaped area with a pond. Ring arrangement of the houses around this central park will offer all eighteen units pleasant views on an otherwise uninteresting site. The houses are grouped in units of three's to alleviate the scattered effect of the typical suburban residential development.
CONSTRUCTION AND MATERIALS: The houses were designed for prefabrication. A standard module makes possible the use of repetitive components. Each house is composed of 16-ft-wide units that will be spanned with 6 in. plywood stressed-skin panels. Fire walls will be of brick and end walls of brick veneer. Curtain walls are to be made up of shingles on plywood on 2″ x 4″ studs.
JURY COMMENTS: Siting, planning and structural system are superior to the architectural expression.... Good direction to try to use prefab methods in this area of housing.... The discipline of the industrialized unit not fully recognized in what is sort of a custom-house layout. ... Architect has been able to keep informality in spite of standardized building methods.... Good site planning and fine human spaces.

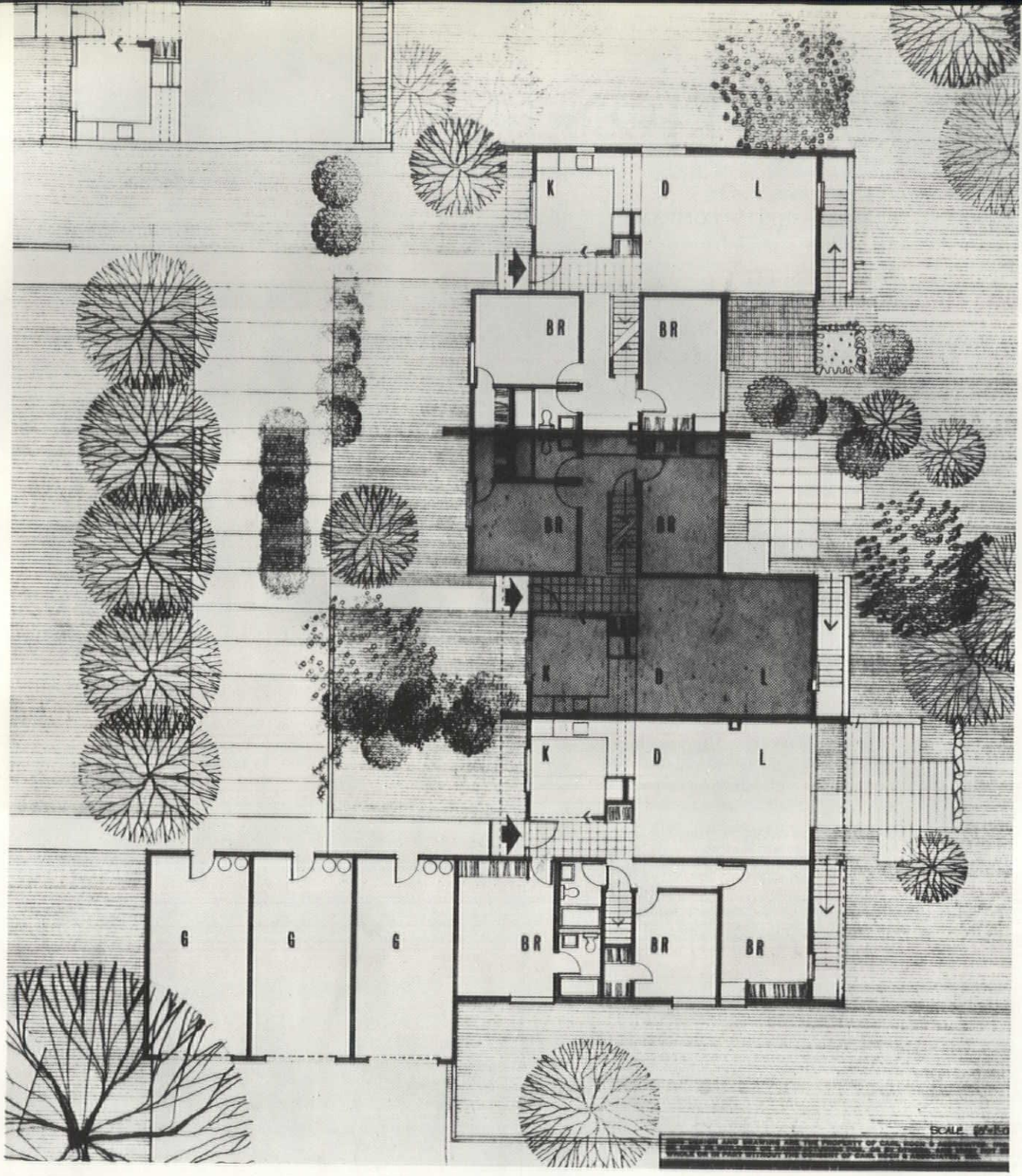


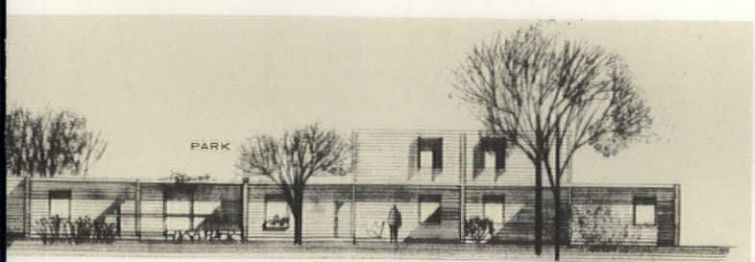


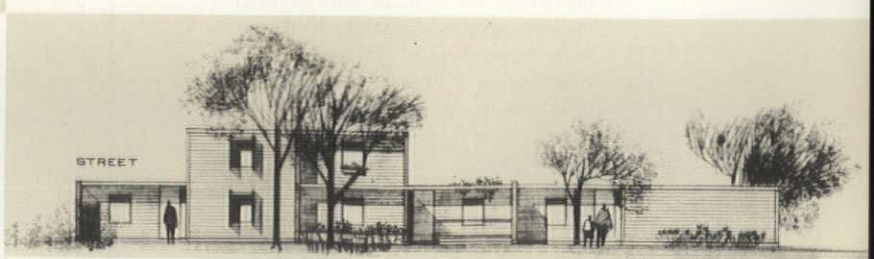




MODEL PHOTOS: JEFFRY HELLER


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PARK


STREET





BASSETTI

SOWDER

CITATION

education

FRED BASSETTI & COMPANY,
ARCHITECTS

FRED BASSETTI,
PARTNER IN CHARGE

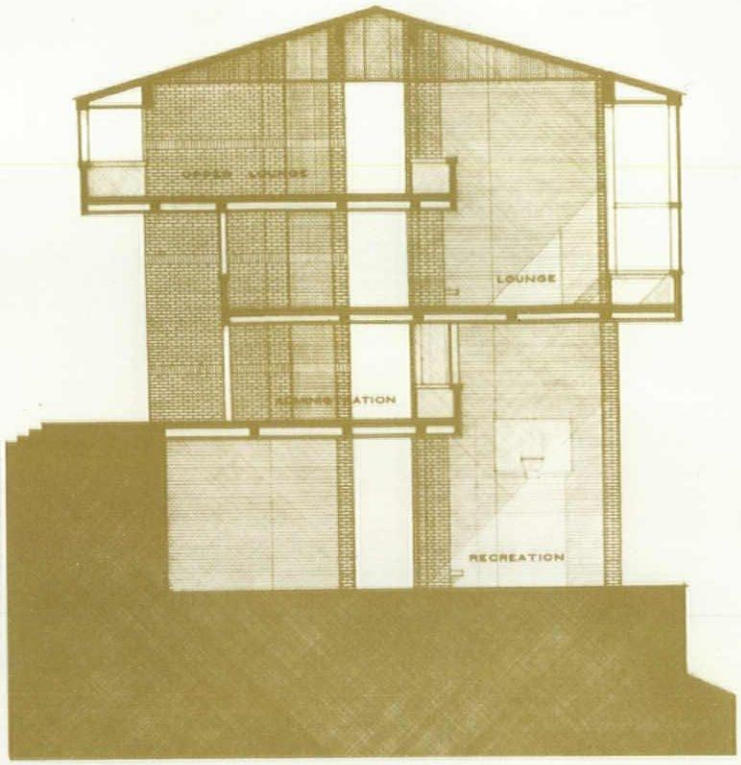
BOB SOWDER, JOB CAPTAIN
RICHARD HAAG ASSOCIATES,
LANDSCAPE ARCHITECTS

DOUGLAS BENNETT,
INTERIOR DESIGNER

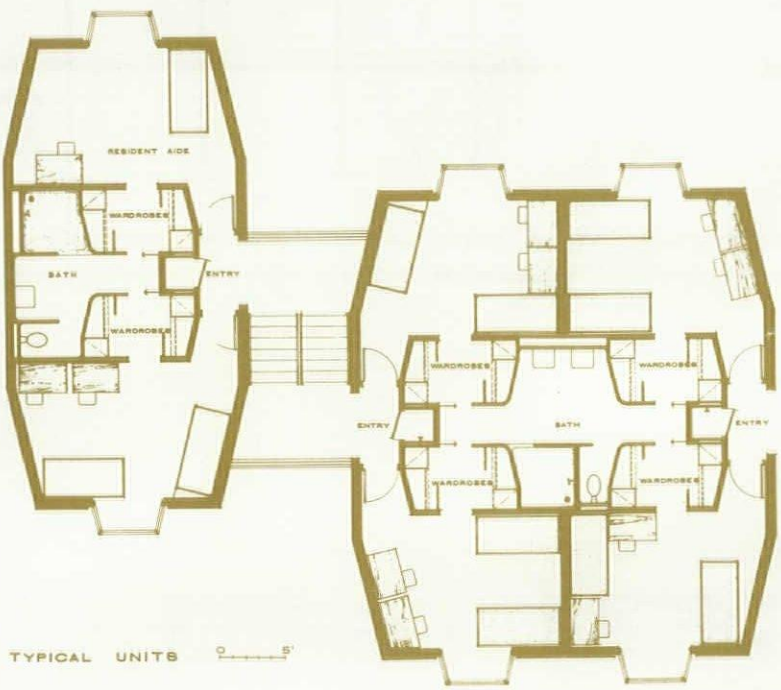
NORMAN JACOBSEN
& ASSOCIATES,
STRUCTURAL ENGINEERS

RICHARD STERN,
MECHANICAL ENGINEER

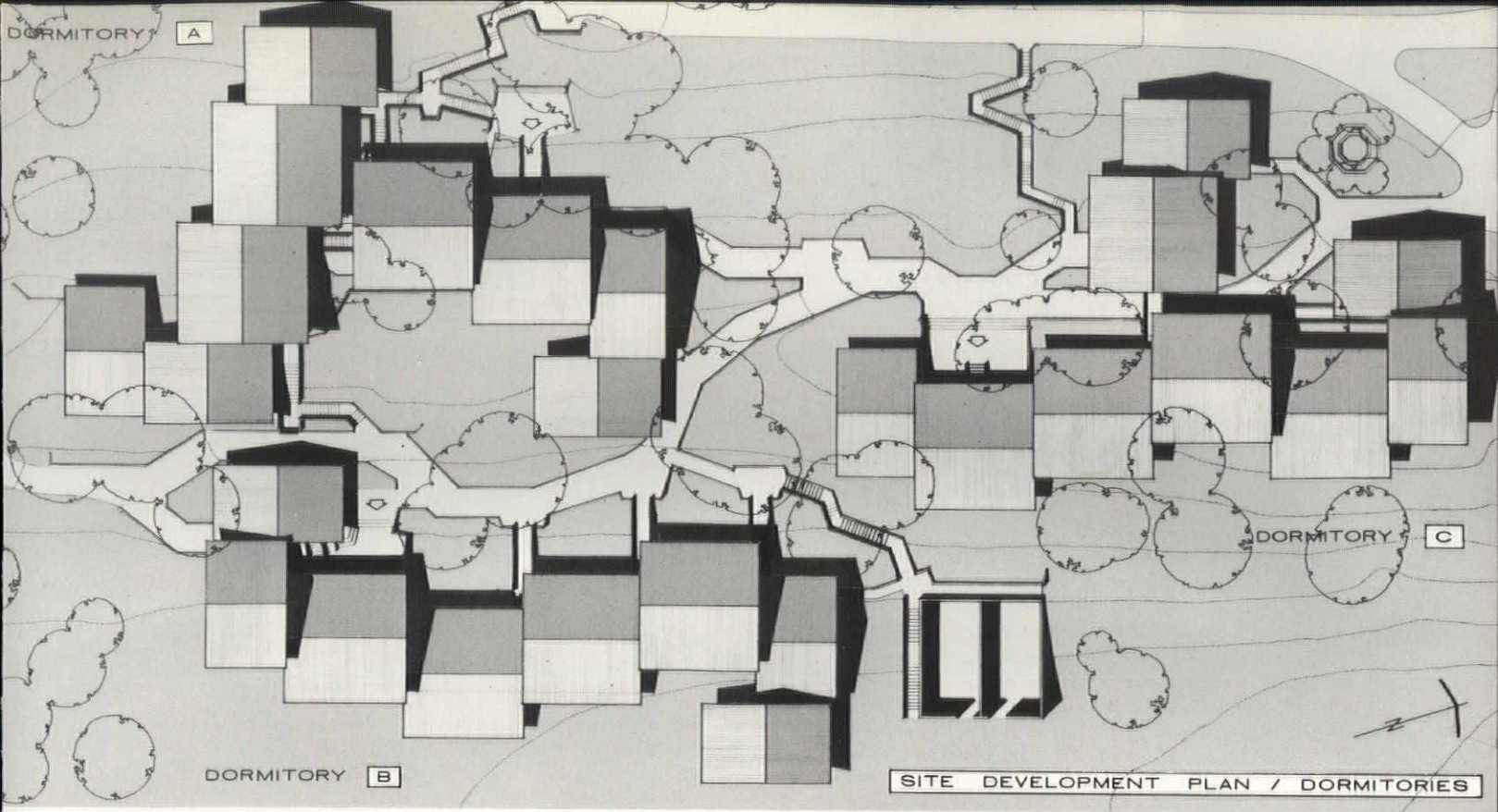
PROJECT: Ridgeway Dormitories, Phase III for Western Washington State College, Bellingham, Washington.
SITE: Six-acre, steeply-sloping, wooded hillside overlooking valley where future academic buildings will be located.
PROJECT REQUIREMENTS: To provide dormitory housing for 450 men in three residential halls. All dormitory rooms to be arranged in suites for four and eight students, sharing common bath facilities. Access to student rooms by means other than inner corridors. Administrative, lounge, and recreational facilities required for each dormitory building.
DESIGN SOLUTION: A residential community of 26 towers, each housing approximately 32 students. One of the towers in each of the three dormitory complexes serves as "student union," providing lounge and administrative offices as well as adjoining terraces. The students are accommodated in double rooms forming two- or four-room suites around a central bath and storage core. Each dormitory room is directly accessible from open-air stairs or bridges from the hillside. In this way, all corridors have been eliminated and the residential rather than institutional character of the scheme has been emphasized.
CONSTRUCTION AND MATERIALS: Reinforced concrete foundations, 8-in. brick exterior bearing walls four stories in height, with wood-framed roofs. Each tower is independently framed and serviced. Floor, stair, and bridge construction is of reinforced concrete.
JURY COMMENTS: Plan very efficient.... Services, closets, bathroom, circulation, all concentrated in center; living rooms around periphery.... Domestic, residentially-scaled college buildings, distinct from academic buildings.... Splayed corners offer opportunity for structural utilization, for bracing.



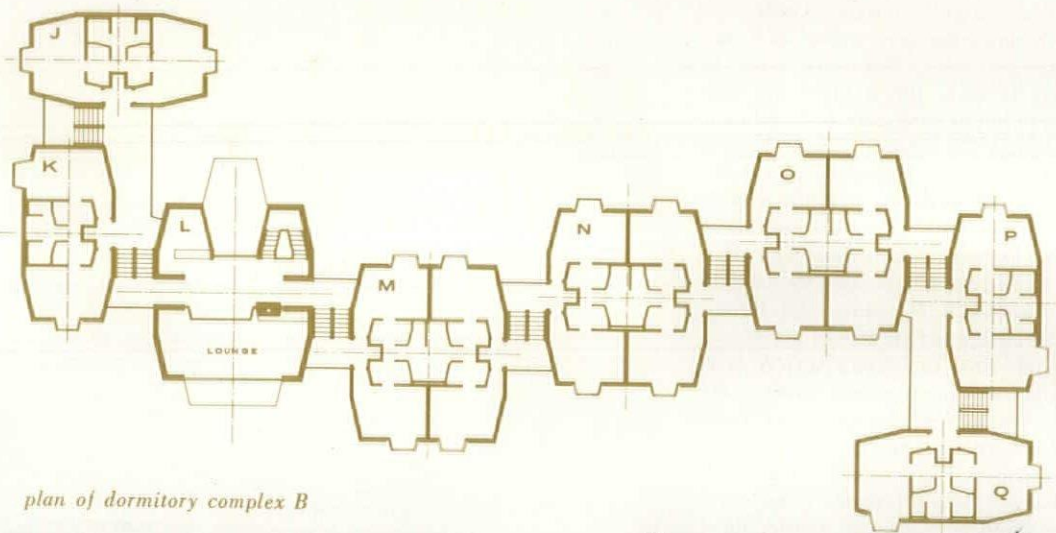
section through student union building



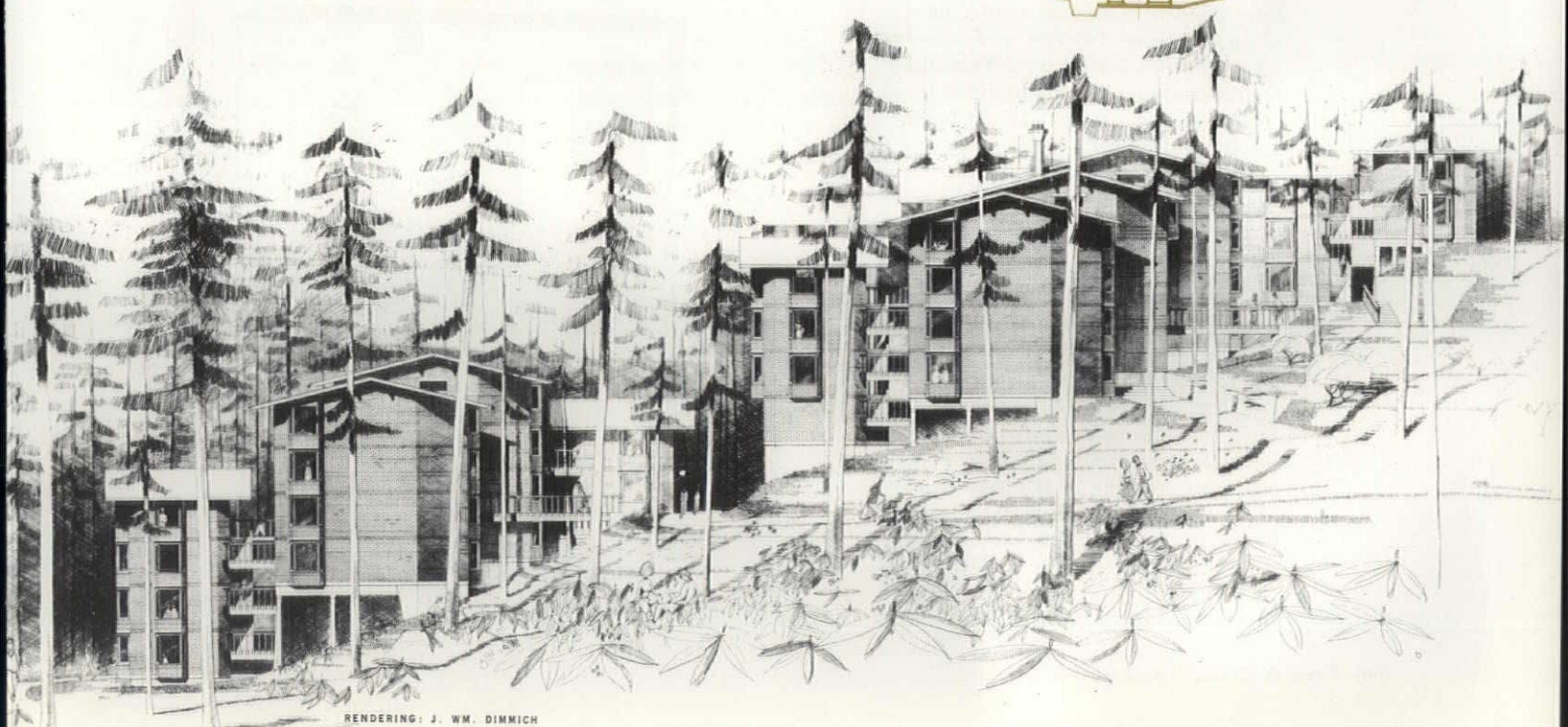
plan of typical two- and four-room suites



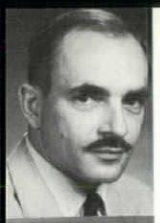
SITE DEVELOPMENT PLAN / DORMITORIES



plan of dormitory complex B



RENDERING: J. WM. DIMMICH











GASSNER

NATHAN

BROWNE

HAGLUND

VENABLE

CITATION

public use

GASSNER, NATHAN, BROWNE AND HAGLUND, VENABLE,
ASSOCIATED ARCHITECTS

O. CLARKE MANN,
STRUCTURAL ENGINEER

SAMUEL L. BURNS & ASSOCIATES, INC.,
MECHANICAL ENGINEERS

PROJECT: Office Building for the State of Tennessee, Memphis, Tennessee.

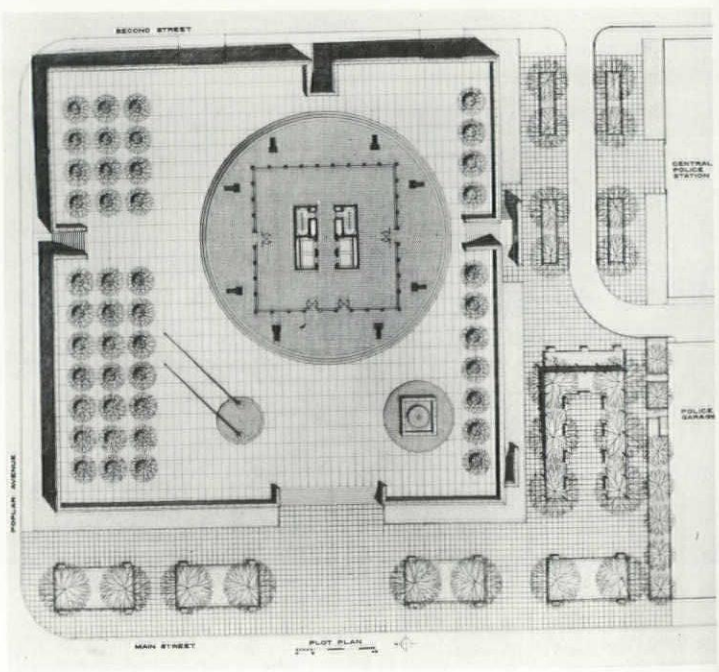
SITE: Within the Memphis Civic Center, which borders the banks of the Mississippi River. The new building is to be placed directly opposite the recently completed Federal Building.

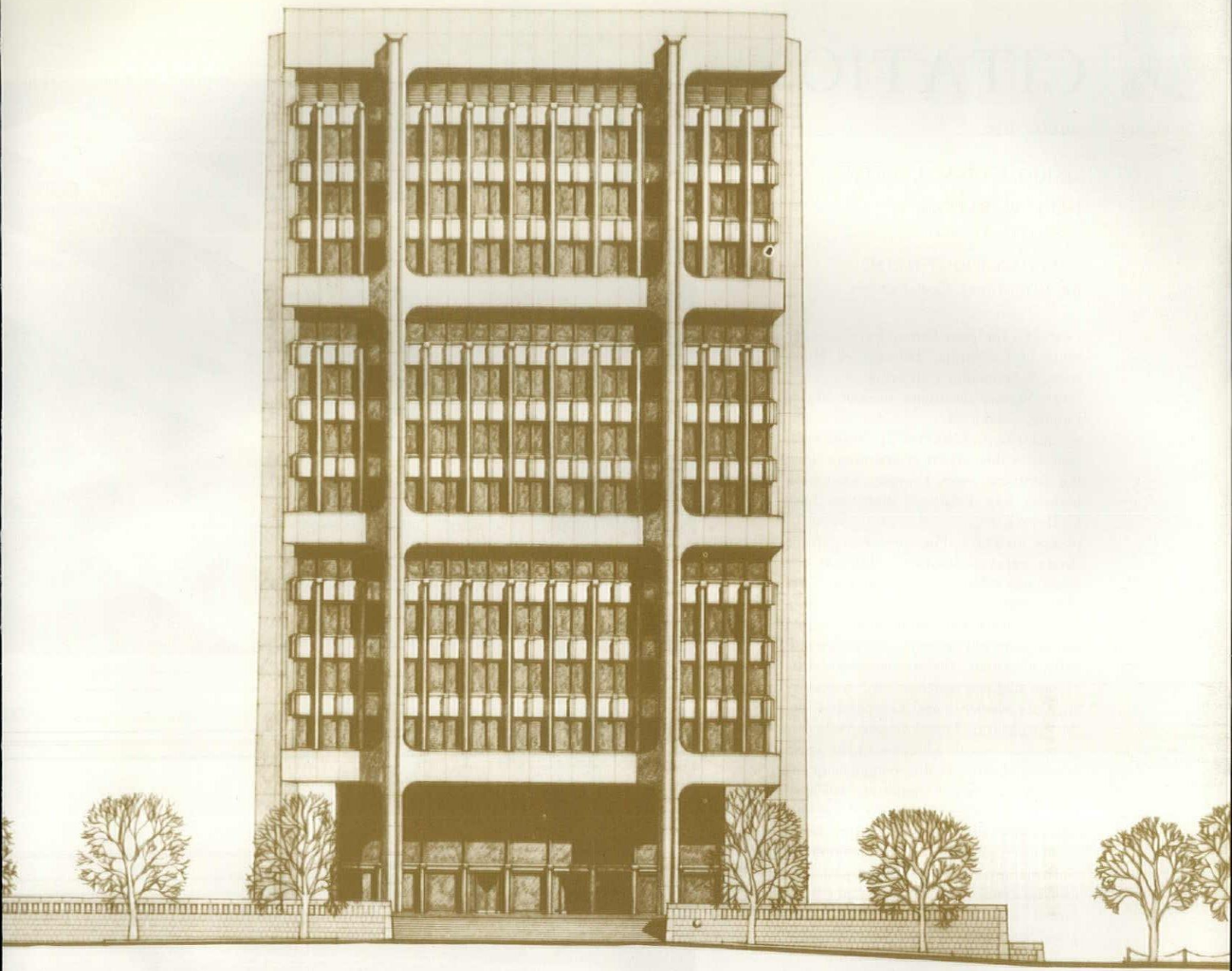
PROGRAM REQUIREMENTS: To provide approximately 100,000 sq ft of office space, some of it to be left unfinished and developed as needed.

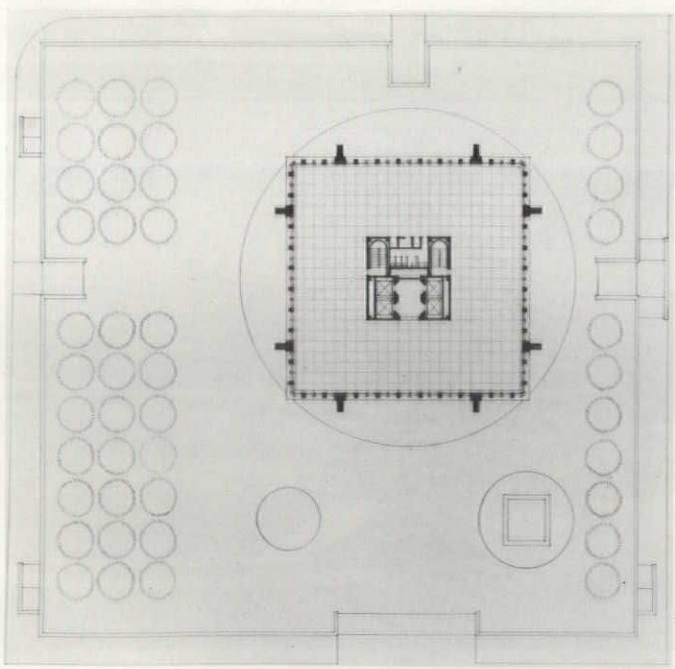
DESIGN SOLUTION: Because of its important location within the Civic Center, the new building has been treated as a vertical focal point. The office tower is square in plan, 192 ft high, and contains 10,000 sq ft on each of 11 column-free floors. The twelfth floor is devoted to offices for the governor and visiting officials. All services are within a 36-ft square central core; major mechanical equipment is on the top floor. The plaza and lobby level will be used for exhibits and two levels of garage and service spaces form a podium for the tower.

CONSTRUCTION AND MATERIALS: A combination of two structural systems—exterior bearing wall and steel super frame—have been employed in an attempt "to develop a new aesthetic for multistory buildings." Precast concrete T-frames receive the floor loads and transfer them to the steel frame. T-frames are designed for a maximum load of three floors, the fourth floor being carried directly by the major frame, which also acts as a brace against wind and earth movement stresses. Floor construction consists of steel beams with cellular deck. The steel frame will be veneered with polished gray granite; spandrel elements to be granite-faced, precast concrete. Solar gray glass will be framed in aluminum.

JURY COMMENTS: The architects' aim to make an unusual structural system and to contribute to the dignity of the civic occasion has proved successful.... From an economic viewpoint, structural solution of concentrating all columns into eight piers is right, as is concentration of resistance to lateral loads at every fourth floor.... Architect made monument out of pure structure.... Will be a civic building with a fine piazza and space around it.









RENDERING: MARK HARTZ



CIAMPI

CITATION

public use

MARIO J. CIAMPI, ARCHITECT

PAUL W. REITER,
ASSOCIATE ARCHITECT

STEPHEN OPPENHEIM,
ARCHITECTURAL CONSULTANT

PROJECT: Junipero Serra Overpasses for State of California, Division of Highways, Sacramento, California.

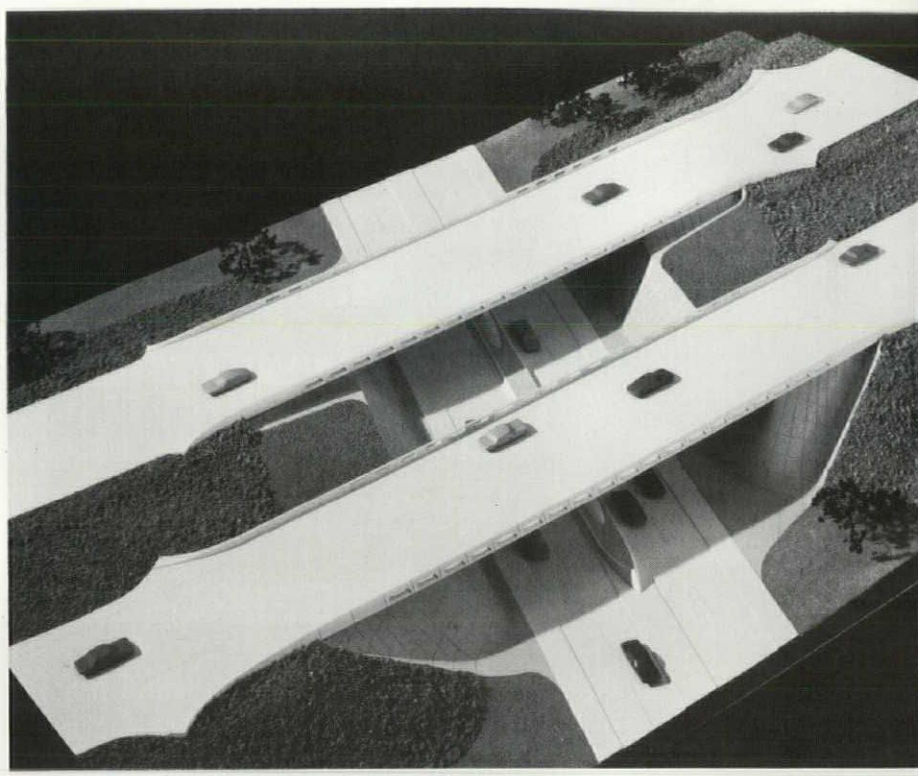
SITE: Various locations in San Mateo County, California.

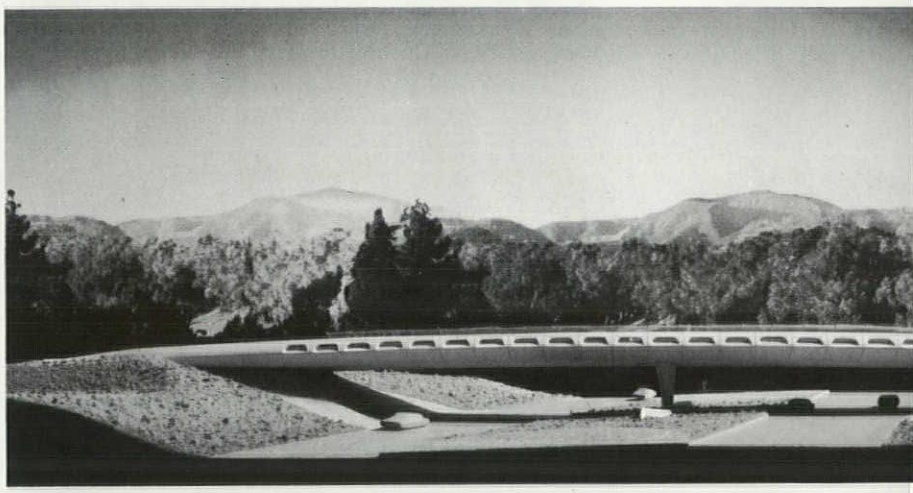
PROGRAM REQUIREMENTS: To design overpasses for the various intersections along the Junipero Serra Freeway, stretching between San Francisco and San José, California.

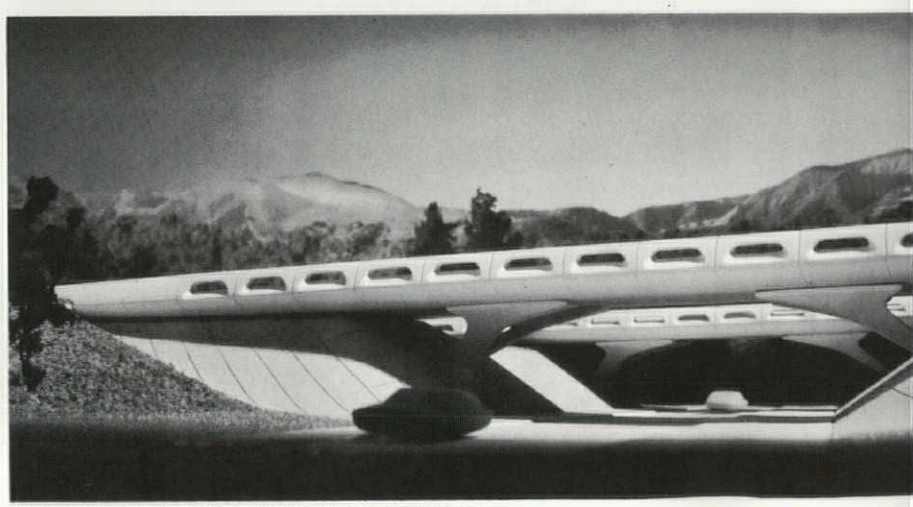
DESIGN SOLUTION: Four prototypes (three shown here) adaptable to different site conditions. "The molded structures," say the designers, "grow from the continuous highway ribbon to gracefully span a sub-network of roadways, and to dynamically punctuate the monotonous fabric of our highway system." All necessary ancillary elements are incorporated into the sculptural form. Guard rails are pierced to provide glimpses of the space beyond. Abutments that complement the form of the bridge spans are surfaced with cobblestones for ease of maintenance. Approximately 70 bridges based on these prototypes are already under construction along the Freeway.

CONSTRUCTION AND MATERIALS: Reinforced concrete.

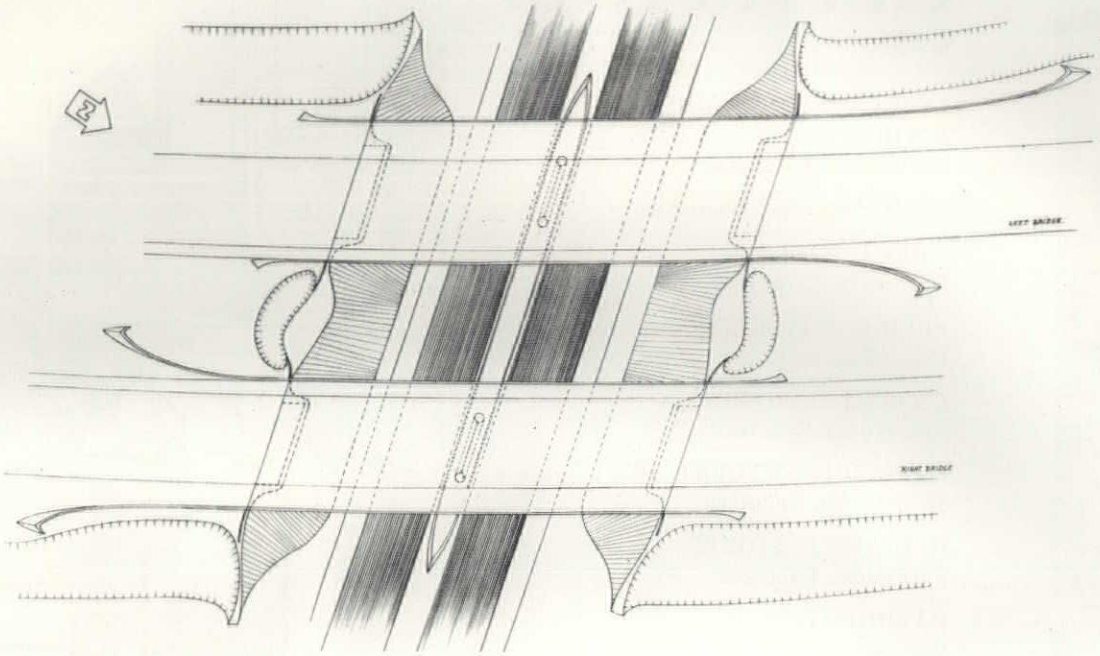
JURY COMMENTS: Extremely clean form, well related to the engineering. . . . Imaginative solution, replacing standard concrete girder construction. . . . The design accepts the world it is in, the mobility of the car, the mechanized world. . . . Structures are designed to keep the continuity of the road bed. . . . In a nation that spends billions of dollars a year on bridge construction, this is an attempt in the right direction. . . . Several good structural principles involved, such as penetrations in the railing, using the railing as part of the deck, providing duct space within the deck and using that as a vierendeel transversely to the bridge deck, so that the loads are resisted by the geometry of the cross section.





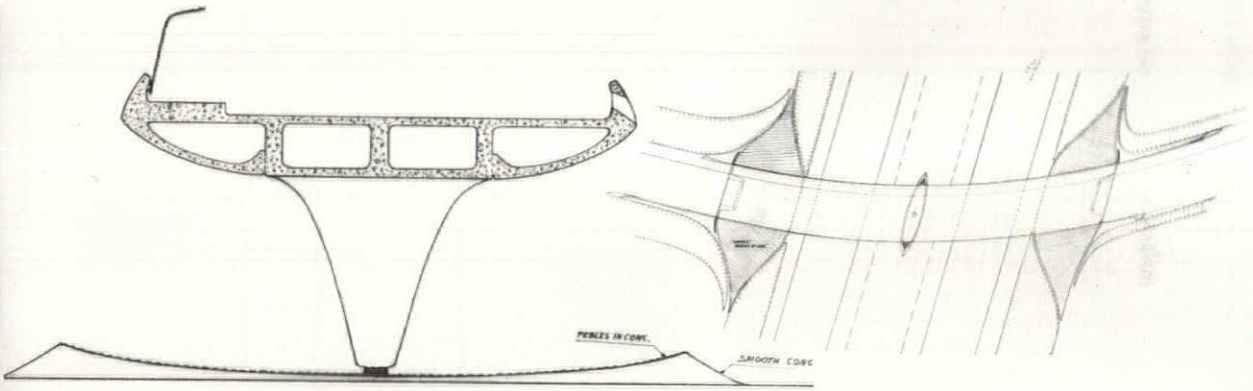


MODEL MAKER: KENNETH KOUPAL; MODEL PHOTOS: GORDON SOMMERS



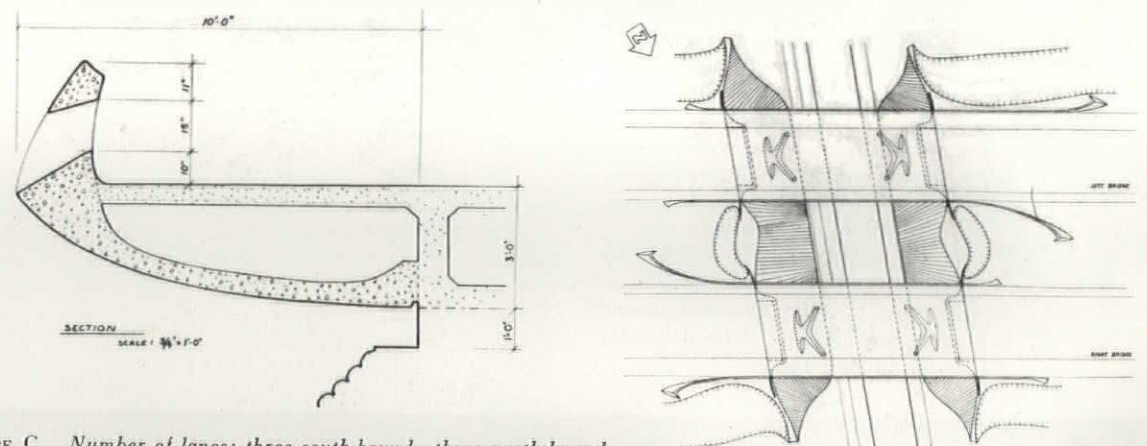
PROTOTYPE A *Number of lanes: three south-bound; three north-bound.*
Span between supports: north—75 ft; south—67 ft.
Total span of undercrossing: 142 ft.



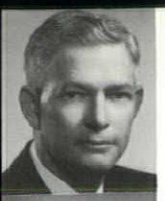


PROTOTYPE B *Number of lanes: two.*
Span between supports: north—108 ft; south 100 ft.
Total span of overcrossing: 209 ft.





PROTOTYPE C *Number of lanes: three south-bound; three north-bound.*
Span between supports: 53 ft.
Total span of undercrossing: 96 ft.











BISSETT

CARLISLE

WOLFF

WOLFF

MOONEY

CITATION

health

LYLES, BISSETT, CARLISLE & WOLFF,
ARCHITECTS ENGINEERS

KEMP MOONEY, DESIGNER

JOHN E. KIRK,
LANDSCAPE ARCHITECT

FRED G. FRANKLIN,
CHIEF ENGINEER

GILBERT H. ROWE,
STRUCTURAL ENGINEER

HAROLD B. SWYGERT, JR.,
MECHANICAL ENGINEER

HERBERT L. STOKES,
ELECTRICAL ENGINEER

DAVID RAY,
PLANNING CONSULTANT

PROJECT: South Carolina Habilitation Center for Mentally Retarded Children, Summerville, S. C. Dr. Vince Moseley, Chairman, Board of Trustees; Dr. E. F. Cicenia, Superintendent.

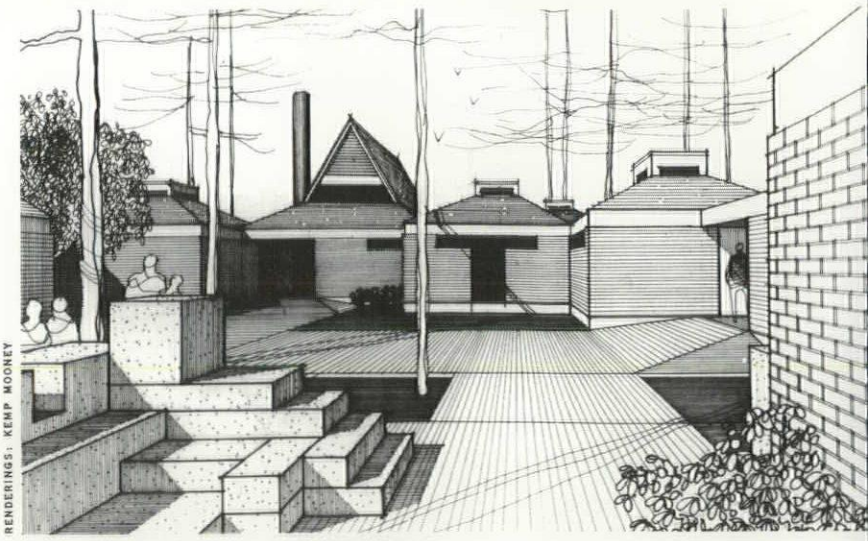
SITE: Old plantation, heavily wooded.

PROGRAM REQUIREMENTS: To provide facilities toward aiding the habilitation of retarded children.

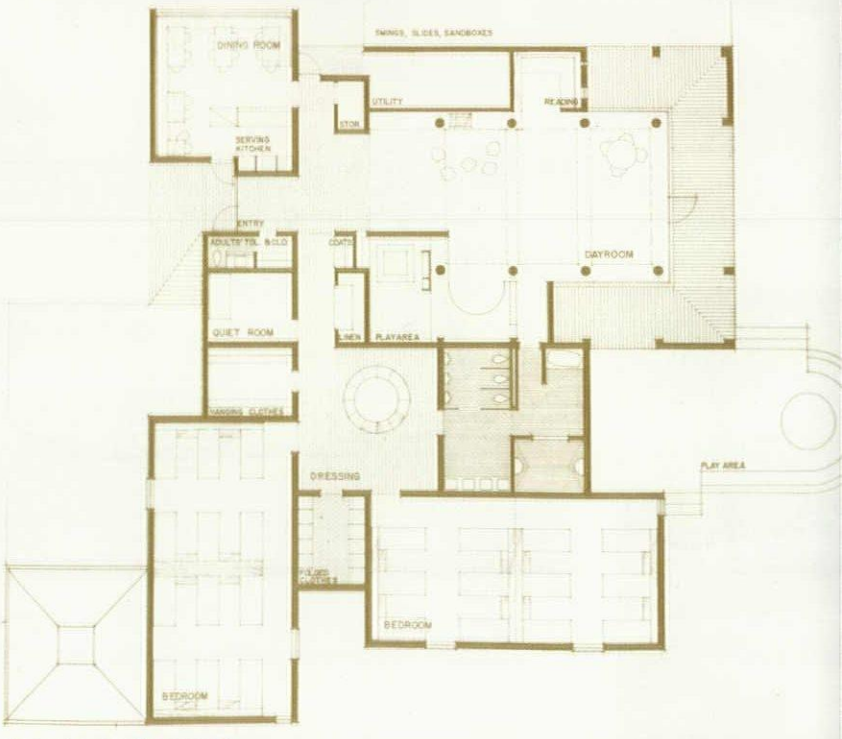
DESIGN SOLUTION: The architects were intent on keeping the scale as close to domestic scale as possible; to segregate vehicular and pedestrian traffic; to provide a pleasant environment that would be conducive to habilitation. "Cottages" are composed of a play area and several small structures; a number of these cottages form a "cluster" around a central court; each of these clusters is again part of a "village," which is related in turn to the large "commons." Various services, as well as the infirmary, recreational and school facilities, are near this central commons, as is the amphitheater. A ring road provides vehicular access to all parts of the center; inner traffic is reserved for pedestrians and electric carts that convey food and laundry.

CONSTRUCTION AND MATERIALS: Brick, exposed concrete, wood and ceramic tile for cottages serving ambulatory patients. Buildings requiring fire-resistant construction are to be of concrete.

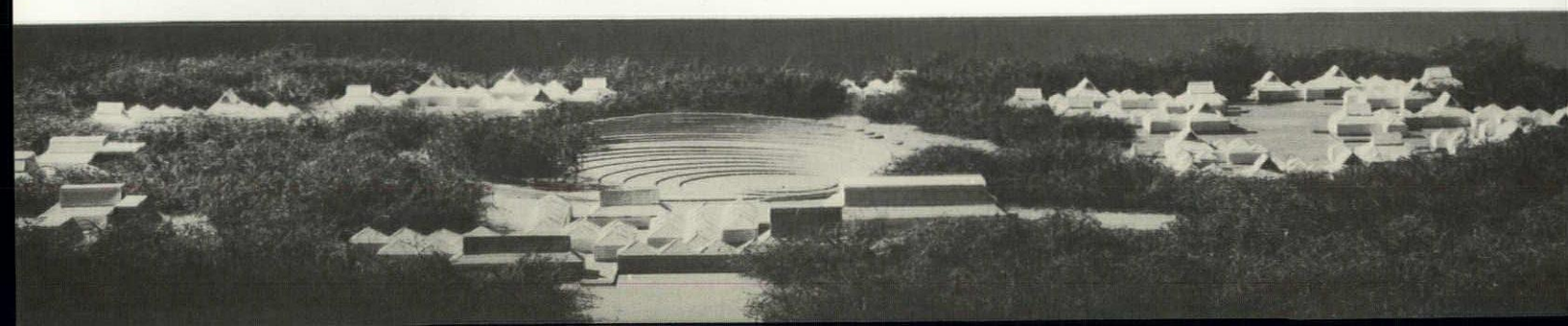
JURY COMMENTS: Clearly a place for children—small scale and informal arrangement.... Nicely clustered around central amphitheater.... Breaks away from institutional pattern.

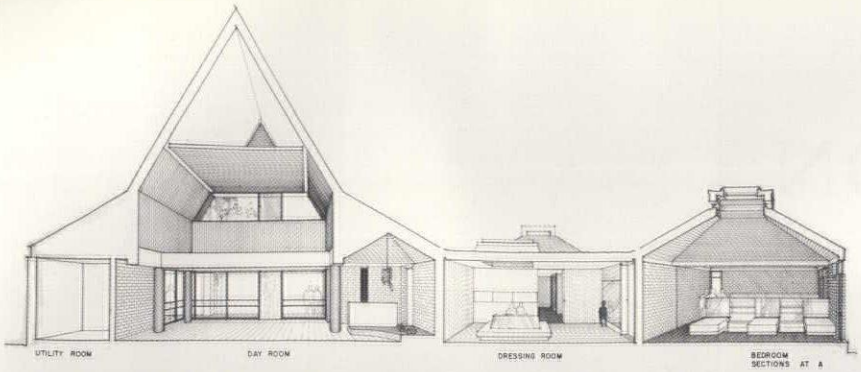


RENDERINGS: KEMP MOONEY



plan of typical "cottage"





section through typical "cottage"

1 *amphitheater*
2 *service area, kitchen*
3 *100 educable girls*
4 *100 trainable girls*
5 *20 special cases*
6 *180 trainable boys*
7 *200 educable boys*
8 *commons, school, administration*
9 *150 severe cases*

MODEL: MARTIN BUCKLEY MODEL PHOTOS: ALT-LEE



RANKINE

BAKANOWSKY

CHRISTIE

DIETRICH

CHERMAYEFF

CITATION

recreation

CAMBRIDGE SEVEN ASSOCIATES, INC.,
ARCHITECTS

LE MESSURIER ASSOCIATES, INC.,
STRUCTURAL ENGINEERS

FRANCIS ASSOCIATES,
MECHANICAL ENGINEERS

PROJECT: New England Aquarium for New England Aquarium Corporation, Boston, Massachusetts.

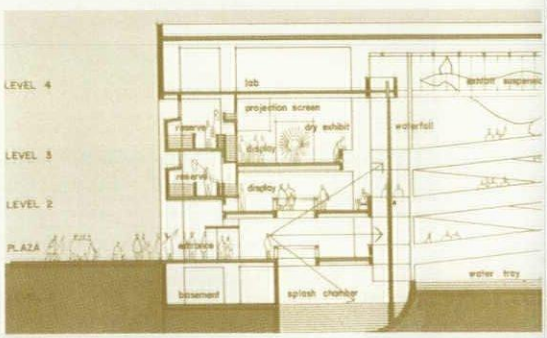
SITE: Central wharf, downtown waterfront renewal area, Boston.

PROGRAM REQUIREMENTS: An exhibit building that would: (a) contain and organize a wide variety of living and museum exhibits in a close relationship to each other; (b) accommodate both a moderate flow of visitors on weekdays and overflow crowds on weekends; (c) exploit the waterfront site and relate the aquarium to the urban plan of the Boston Redevelopment Authority. The aquarium is to be the focus of the pedestrian-oriented waterfront plan.

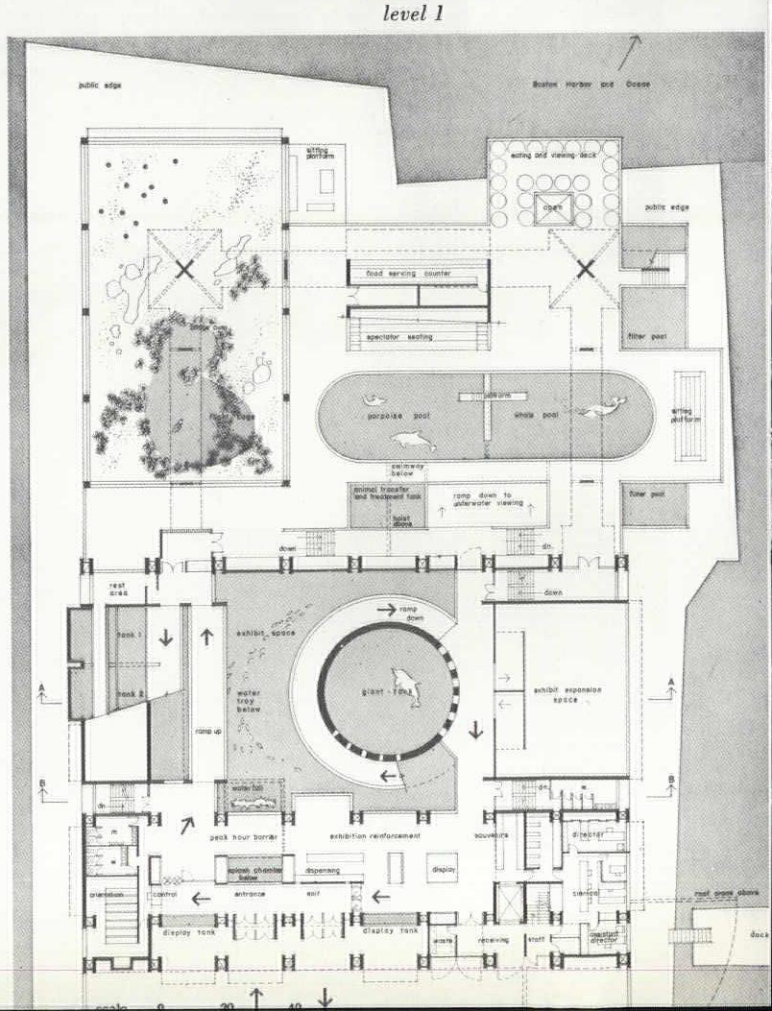
DESIGN SOLUTION: The interior is conceived as a single space, illuminated almost exclusively by glowing tanks and exhibits. Daylight is excluded. On peak days, circulation is forced in a one-way flow up a ramp through the big space and past three large tanks to an exhibit gallery above. A labyrinth of smaller exhibits returns the visitor to the big space and to a waterfall that plunges through the high space to a chamber below. The cycle is repeated on the level above, where the visitor is given a choice between spectator seating for shows, a ramp spiraling down around the large central tank, and a ramp leading to the outside. Exhibition space is sandwiched between two service floors and is served by a structural-mechanical matrix of paired columns.

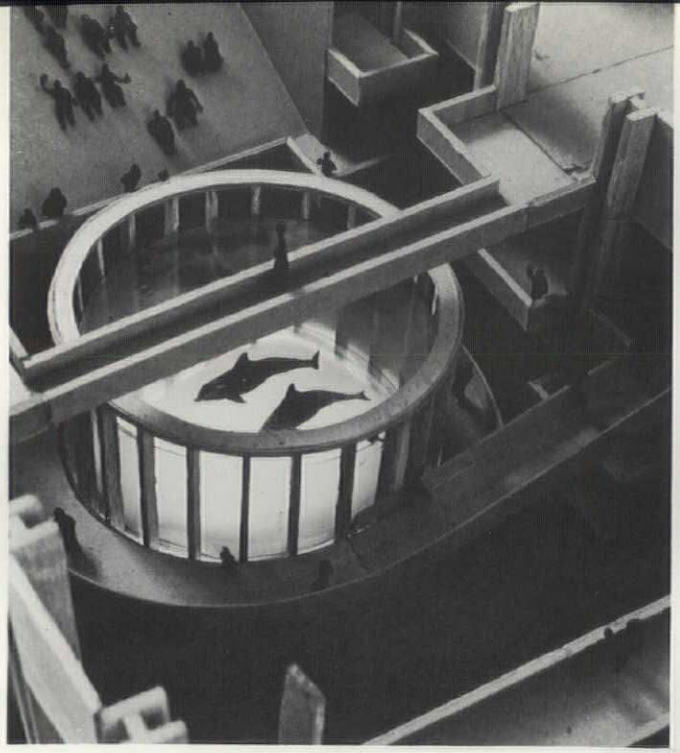
CONSTRUCTION AND MATERIALS: Poured concrete, left exposed inside and out. The exterior bird cage on the roof terrace is a concrete frame with steel wires tensioned in one direction.

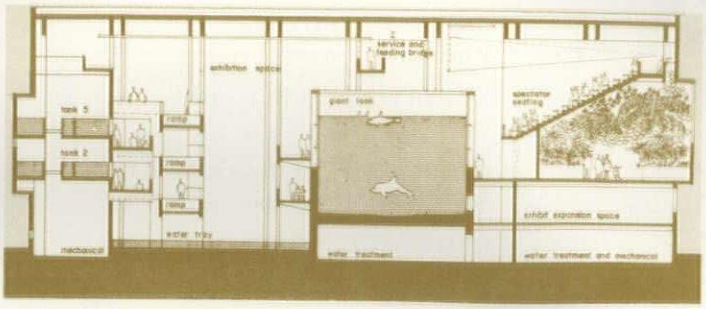
JURY COMMENTS: Would be nice if façade expression said more about the particular fact that it is an aquarium. . . . Is much more exciting inside, where spaces flow into each other. . . . Visitors will have fun with ramps, bridges, passing from inside to outside, up and down. . . . Great variety of spaces. . . . Simple structural elements put together neatly.



level 1

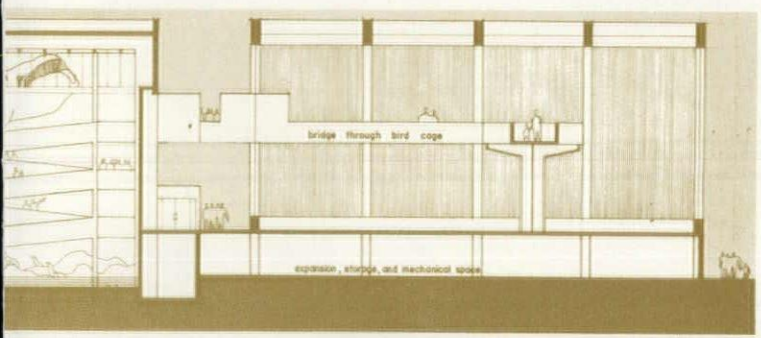






section B-B

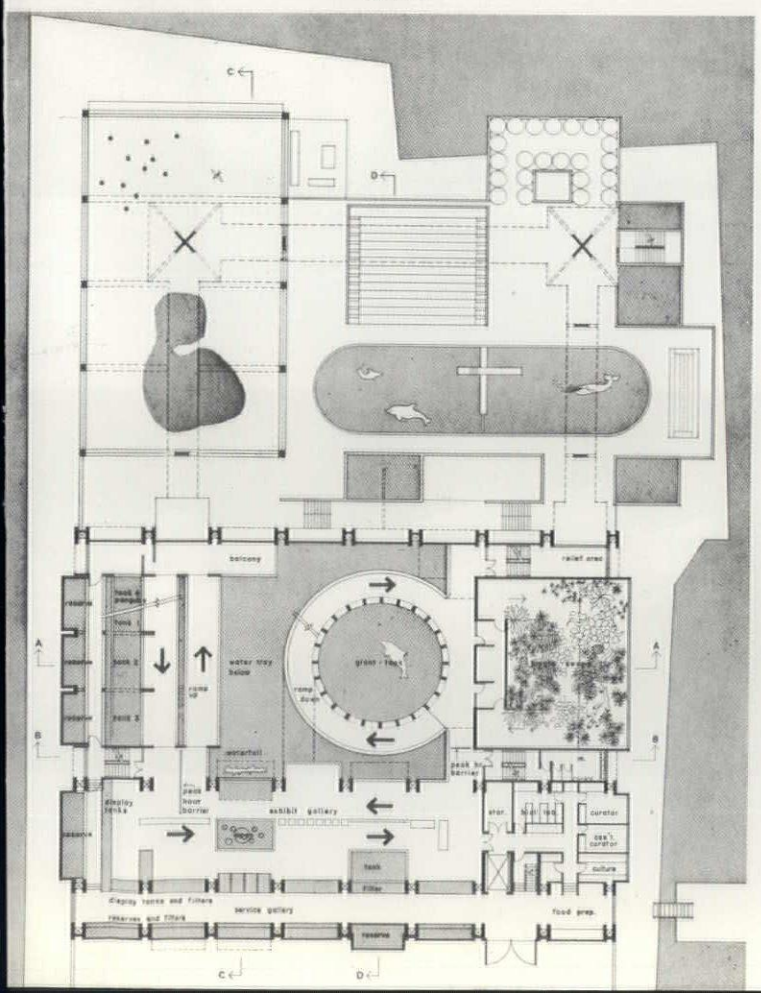
section C-C

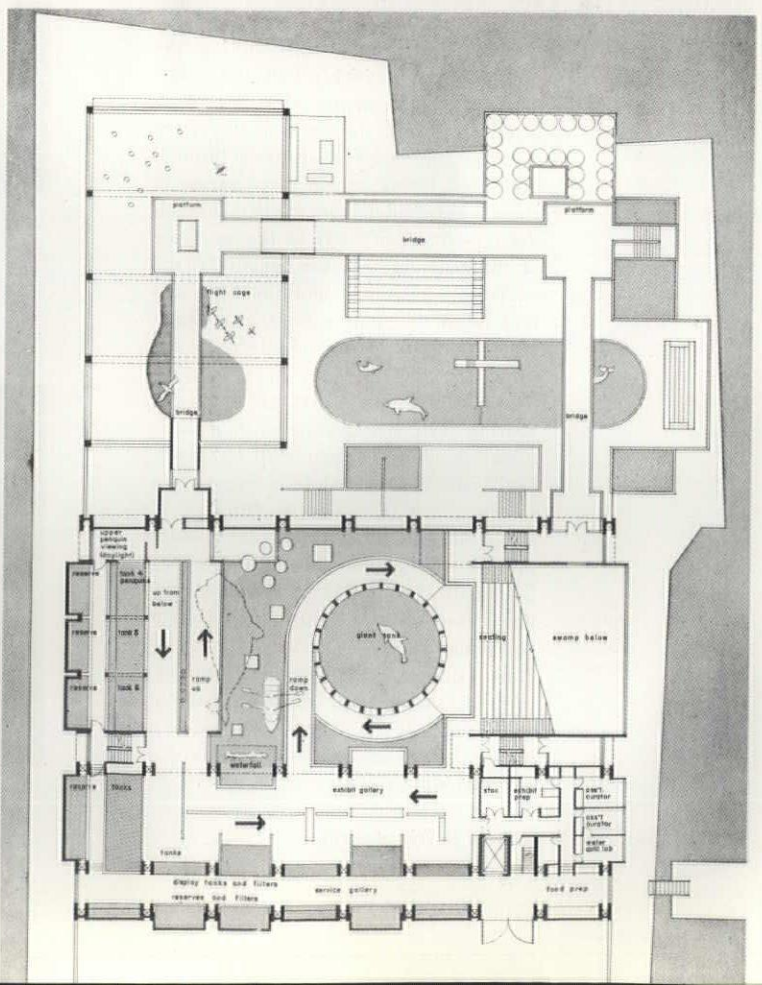




level 2

level 3









HARROVER

CHURCH

CITATION

religion

MANN & HARROVER, ARCHITECTS

ROY P. HARROVER,
PARTNER IN CHARGE

ROBERT B. CHURCH, III,
CHIEF DESIGNER

GEORGE B. JETT & ASSOCIATES,
STRUCTURAL ENGINEERS

GRIFFITH C. BURR,
MECHANICAL ENGINEER

PROJECT: The Church of the River for The First Unitarian Church of Memphis, Tennessee.

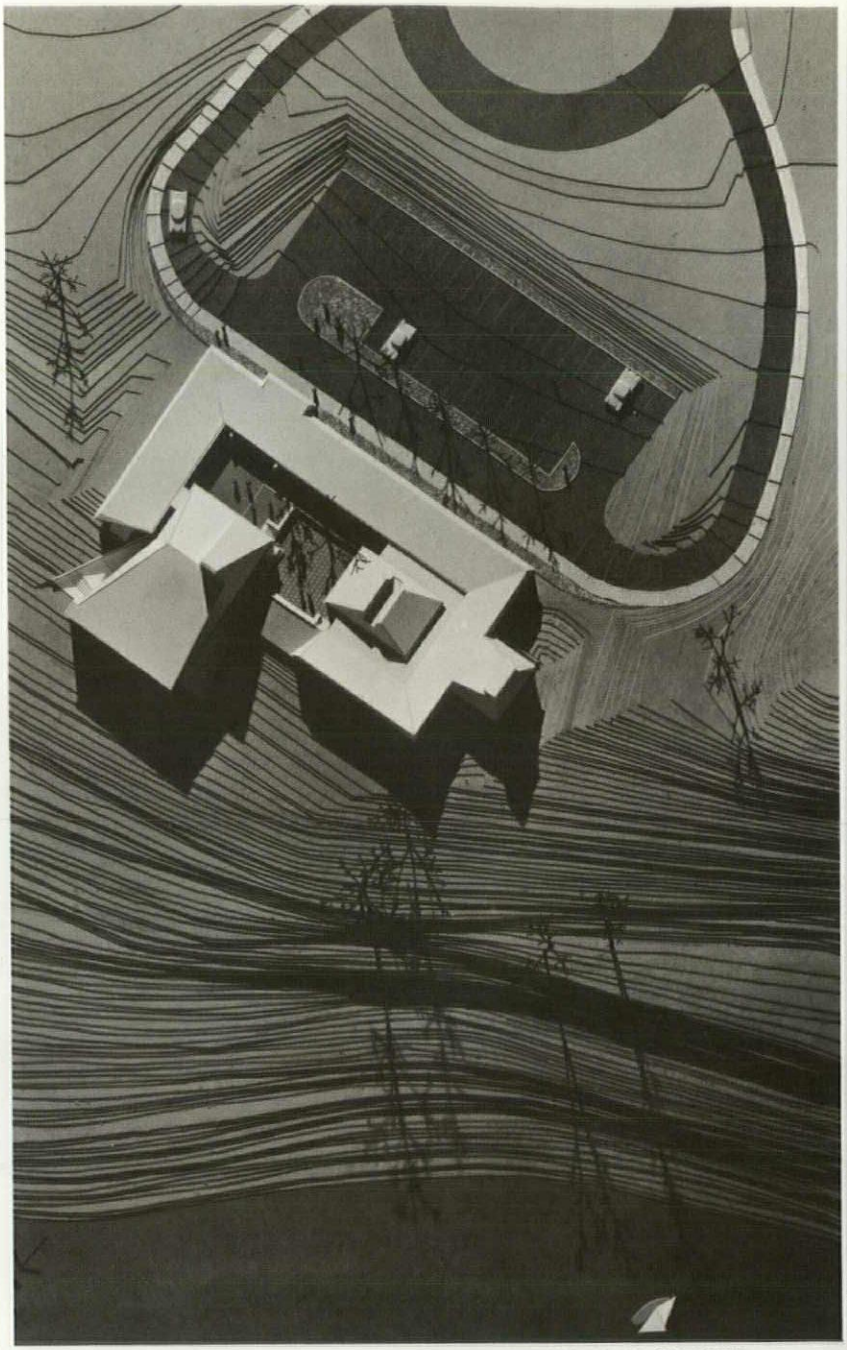
SITE: Property extends down precipitous, grassy bank to Mississippi River, 100 ft below. Excellent views of farmland and distant hills across river. Site is part of an urban renewal area later to have apartment and town houses.

PROGRAM REQUIREMENTS: To house a small Unitarian congregation requiring for the present a 250-seat sanctuary, eight Sunday School rooms, a minister's study and office. In two later stages, a multipurpose hall, meeting room, and small chapel are to be added. The architecture was to express the Unitarian belief in reason, logic, simplicity, and the order of the universe as revealed in nature.

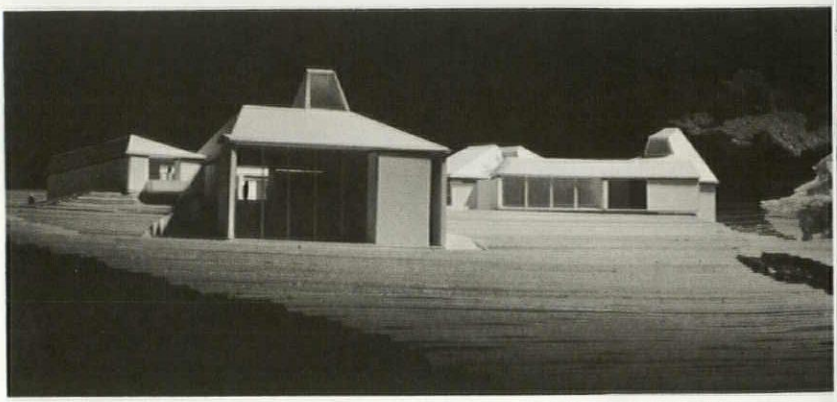
DESIGN SOLUTION: The congregation's wish to emphasize the handsome view influenced orientation, placement, and plan arrangement of the church and its ancillary facilities. The Sunday School unit focuses inward, surrounding the multipurpose fellowship hall and courtyard. The classrooms also act as a screen to block the view of the river from the approach road. Entry is through a covered loggia, which gives access to classroom corridors, and further, through the closed upper court to the vestibule of the sanctuary. In the sanctuary, the walls splay outward and the floor and roof follow the falling river bank framing, in effect, the view of the river and shoreline.

CONSTRUCTION AND MATERIALS: Masonry bearing wall construction with conventional wood roof truss; slab on grade. Walls are to be of white brick; copper roofing; floor of red-brown brick; ceiling of western cedar in sanctuary, multipurpose room, and chapel. Heating by forced-air or chilled air in underfloor tile ducts from central system in basement equipment room.

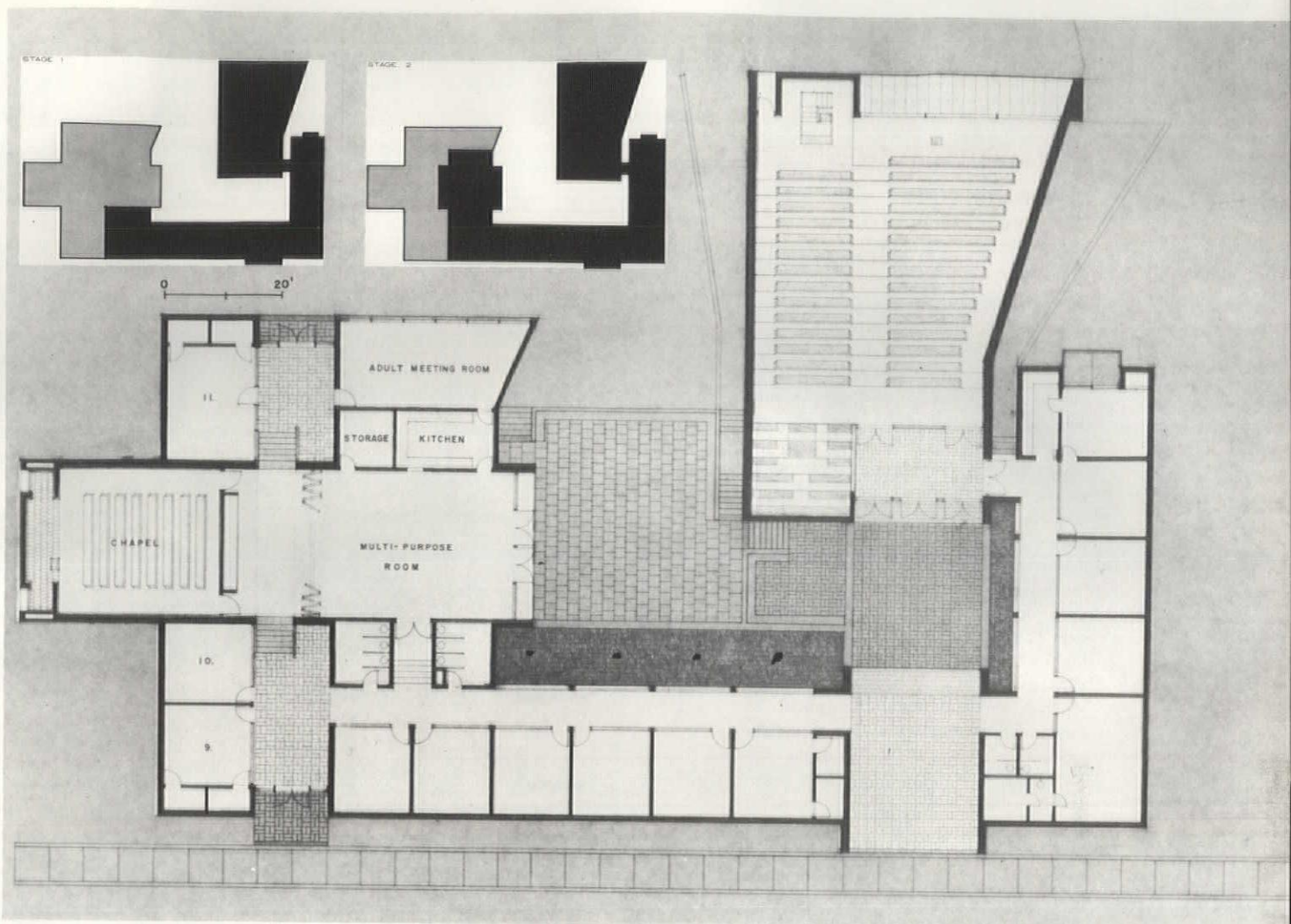
JURY COMMENT: Drama and form expressed simply and directly, without exhibitionism. . . . Nice courtyard—a human space—offers a true vestibule, a real reception place.



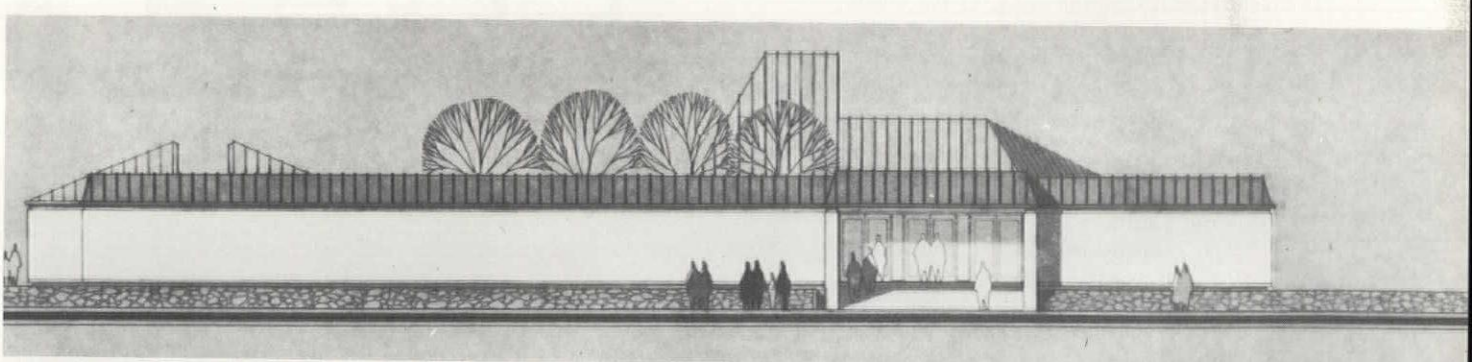
MODEL PHOTO: API PHOTOGRAPHERS, BILL CARRIER



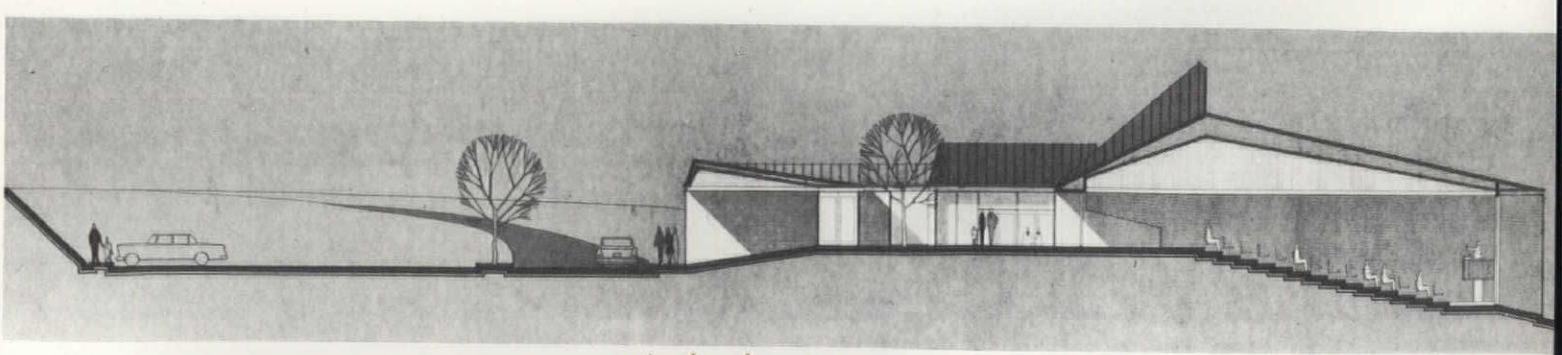
MODEL PHOTO: OSCAR MENZER



ultimate building plan, stage 3



south elevation, stage 1



section through sanctuary



BRITTON



JENKINS

CITATION

residential planning

EARLE BRITTON, ARCHITECT

DOYLE JENKINS,
ENVIRONMENTAL PLANNER

PROJECT: Garden Residences for Mr. J. Edwards, Houston, Texas.

SITE: 630′ x 240′ in-city property.

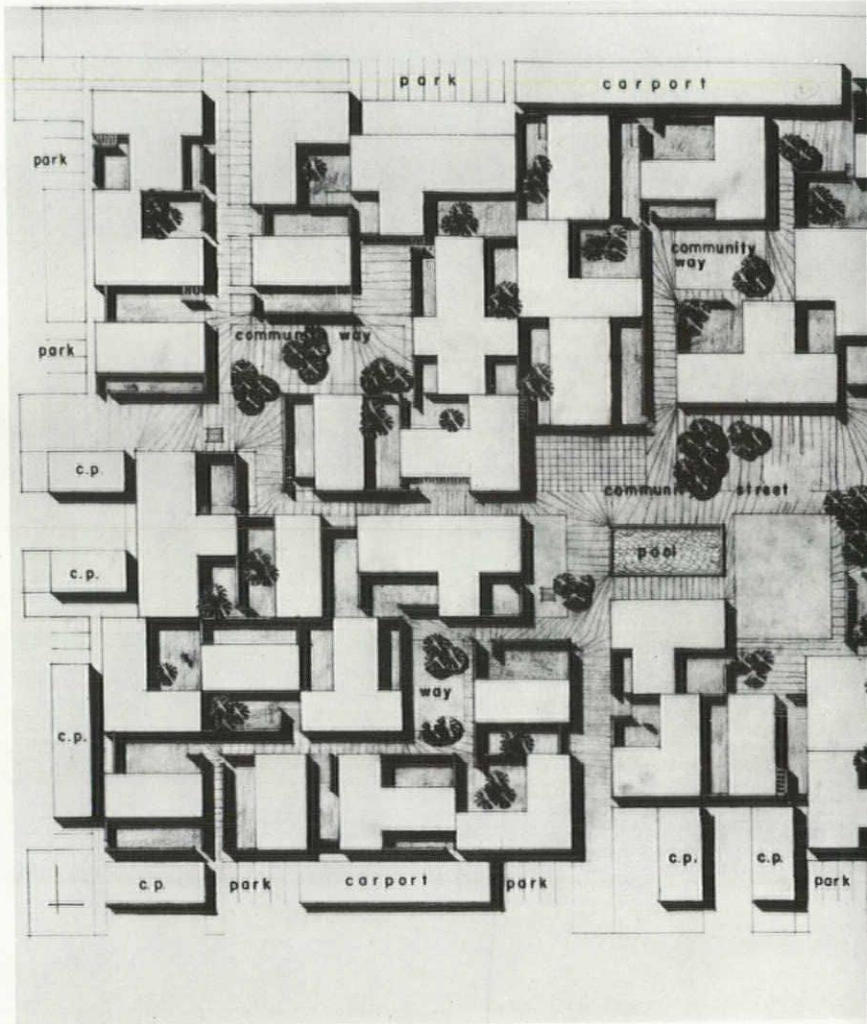
PROGRAM REQUIREMENTS: Residences for young families, ordinarily faced with the purchase of a tract house in the suburbs, or the rental of a cramped apartment in a convenient location.

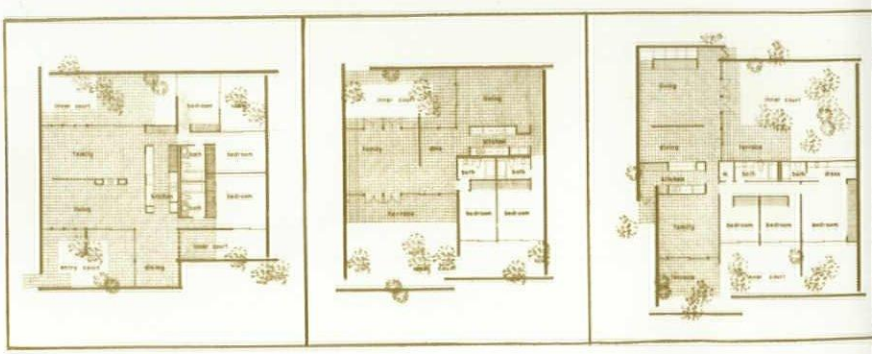
DESIGN SOLUTION: A plan that offers advantages of both types of living accommodations. "The home owner within this project," explain the designers, "can maintain the unity of the family within the privacy of his own indoor and outdoor spaces, pride of ownership, and yet gain better location (density allows for higher land value), as well as the use of a community pool, play areas, and other services not within the means of individual owners." The use of cluster grouping, instead of row housing, has permitted the designers to form community spaces and to establish pleasant spatial sequences. Privacy within the units is assured by avoiding placement of two living spaces on opposite sides of a party wall. Instead, living spaces of one house alternate with courtyards of another. Again, in contrast to the typical row house plan, where exterior space is treated as an appendage to the house, the open-air spaces of these houses are an integral part of the living areas. The garden residences are designed with a minimum of interior partitions and restricting enclosures.

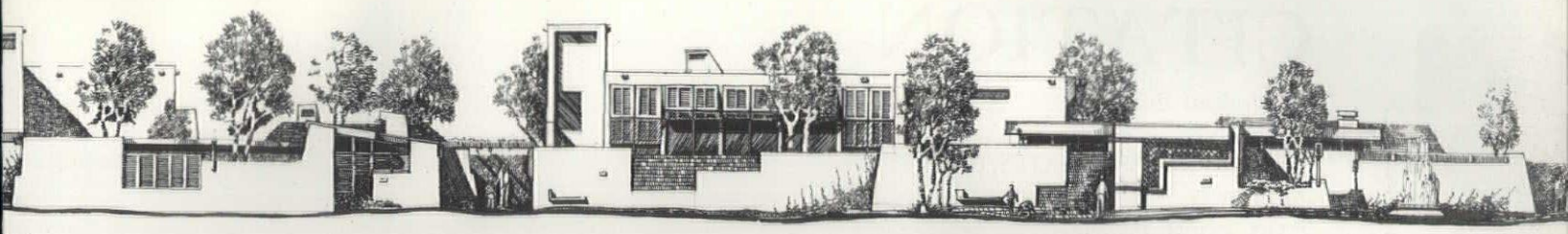
CONSTRUCTION AND MATERIALS: Concrete block-walls stuccoed; wood paneled interior partitions, brick and wood flooring; combination of wood shingle and built-up roofing.

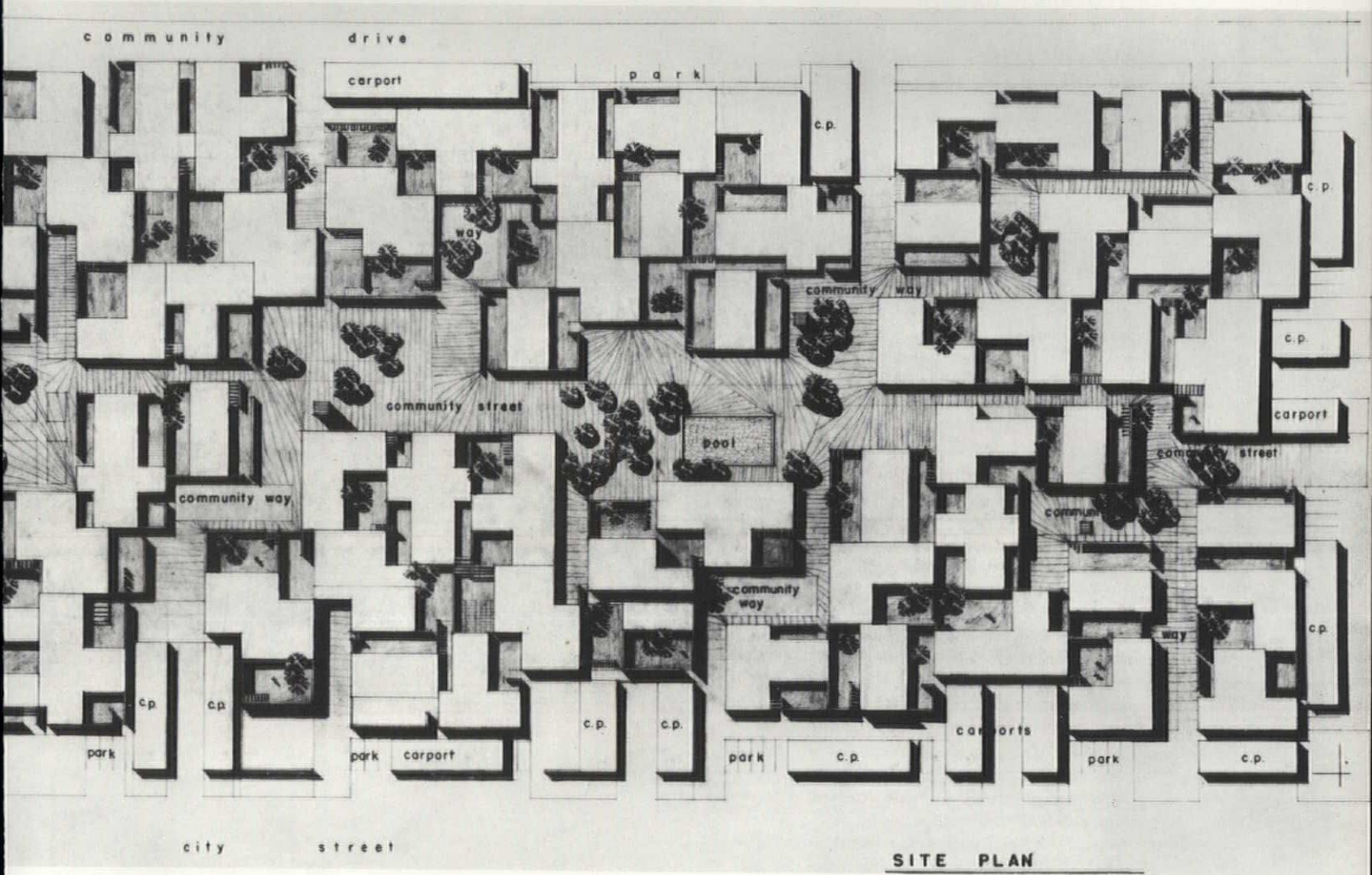
JURY COMMENTS: Scheme specifically selected for its site plan. . . . There is a correct balance between privacy and social contact. . . . It is a pedestrian village, cars are kept out. . . . Although it is particularly suited to the Southwest, where small spaces and shade are important, it is nevertheless of the right density and has the right kind of exterior spaces for almost anywhere. . . . Each of these spaces really an outdoor room. . . . Doesn't become a kind of wasteland. . . . Everything held and contained and meaningful.



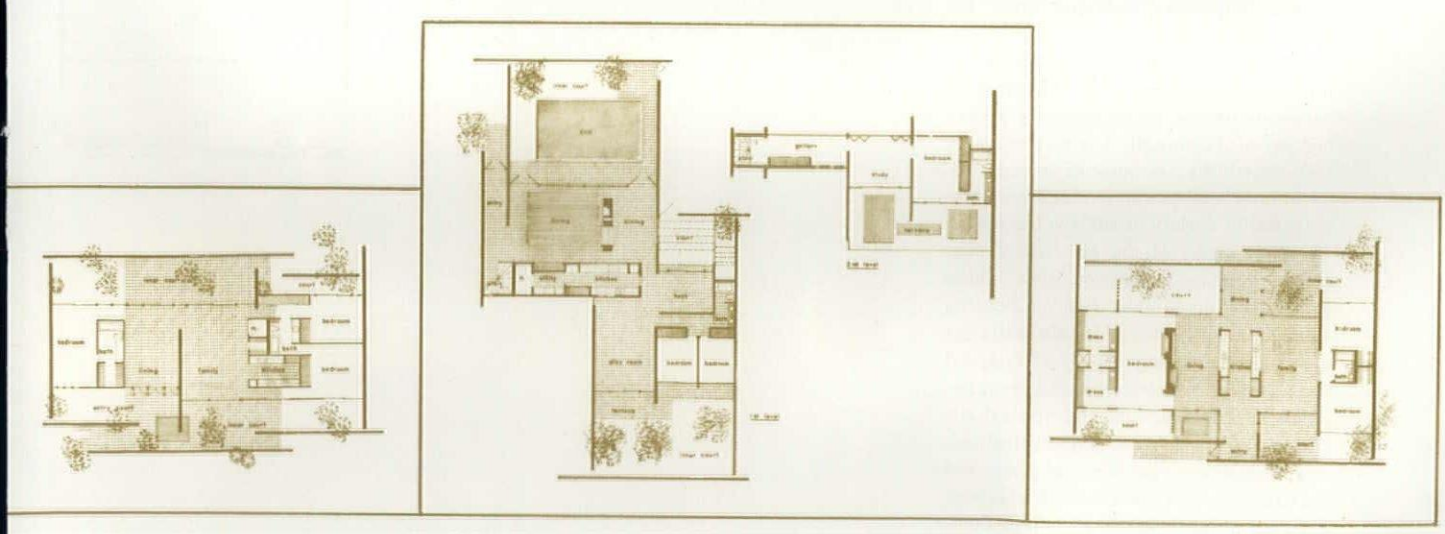


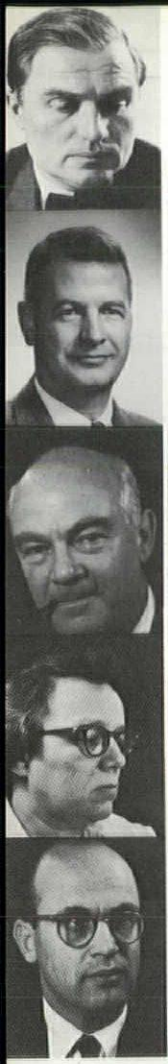





community drive
carport
park
c.p.
way
community way
community street
pool
community way
carport
community street
community way
c.p.
park
carport
carports
city street

SITE PLAN





KOCH

DAY

LIPSHUTZ

ROSS

ERTMAN

CITATION

residential design

CARL KOCH & ASSOCIATES, INC.,
ARCHITECTS

CARL KOCH, PRINCIPAL

FREDERIC L. DAY, JR.,
LEON LIPSHUTZ,
MARGARET ROSS,
GARDNER ERTMAN, ASSOCIATES

SEPP FIRNKAS,
STRUCTURAL ENGINEER

SAM LESBURG & ASSOCIATES
AND GOODALL SHEPIRO
& ASSOCIATES,
MECHANICAL ENGINEERS

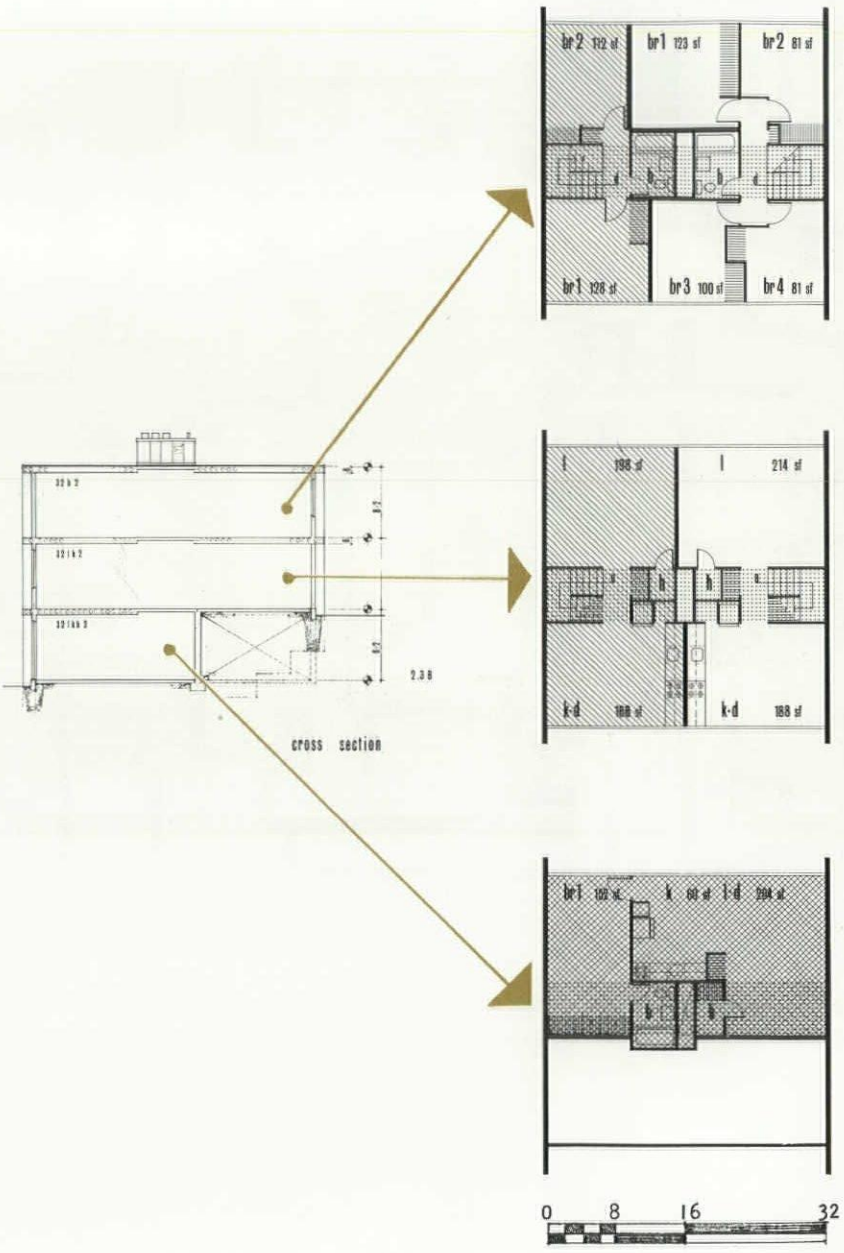
PROJECT: Low-Cost Housing System (original study for Boston Redevelopment Authority). Prototype #1: Academy Homes, Roxbury, Massachusetts, for Buse Boston Inc.; Prototype #2: Cove Park, New London, Connecticut, for Shaw Gardens, Inc.

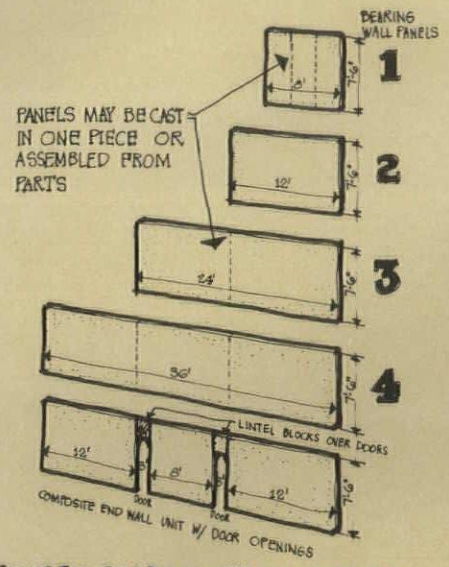
PROGRAM REQUIREMENTS: To design moderate-income, high-density family housing of high architectural quality for a rental range between $75 for one-bedroom unit and $105 for four-bedroom units. Financing under Section 221 (d) 3 primarily. Building techniques to be advanced, but currently workable. Flexibility desired in size and type of dwelling.

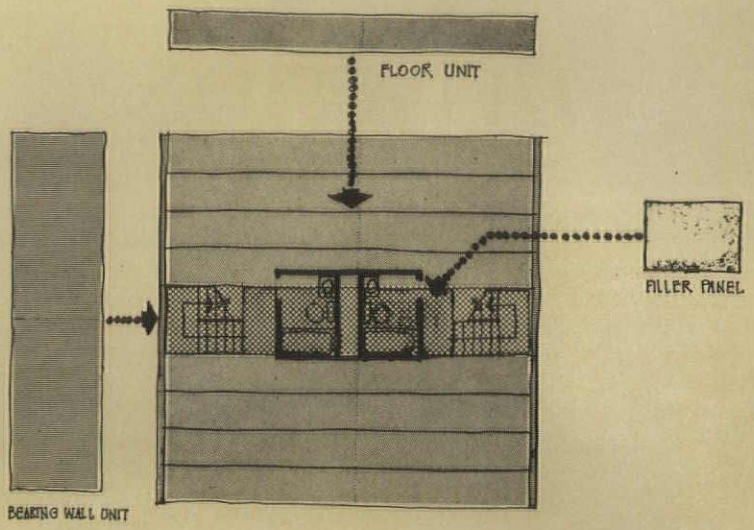
DESIGN SOLUTION: The module of the standardized and interchangeable components was established on the basis of: dwelling unit scale (uniform 32′ building width, for example, accommodates three bedrooms); allowable spans for prestressed concrete; alternate stressed-skin plywood construction using half-spans. Floor plans are of a constant width, varying only in depth. Units can be adapted and combined to produce apartments of one-to-five bedroom size, two-to-four-story buildings, flats, row houses, duplexes, walk-ups, and for ground-floor commercial use.

CONSTRUCTION AND MATERIALS: Reinforced concrete was preferred because of its fire-resistance in high-density areas; because of its strength, low maintenance, and availability; because of its suitability to industrial production and aesthetic potential in variety of surface treatment. The long spans of the prestressed concrete minimizes foundation work. These prestressed floor slabs rest on bearing walls 32 ft on centers. Curtain walls are non-bearing, leaving choice of material to individual preference or code requirements. Mechanical core and vertical circulation are combined and centralized.

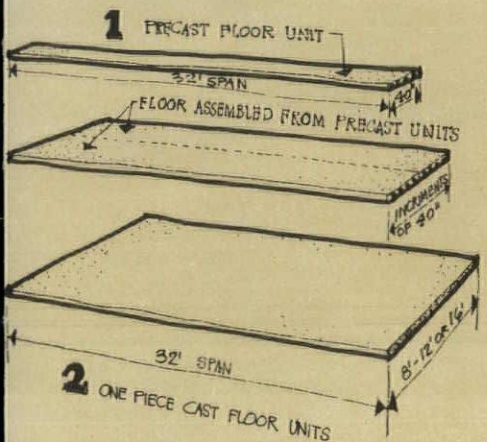
JURY COMMENTS: Economy of space and construction.... Industrialized unit suggests an infinite variety of applications.

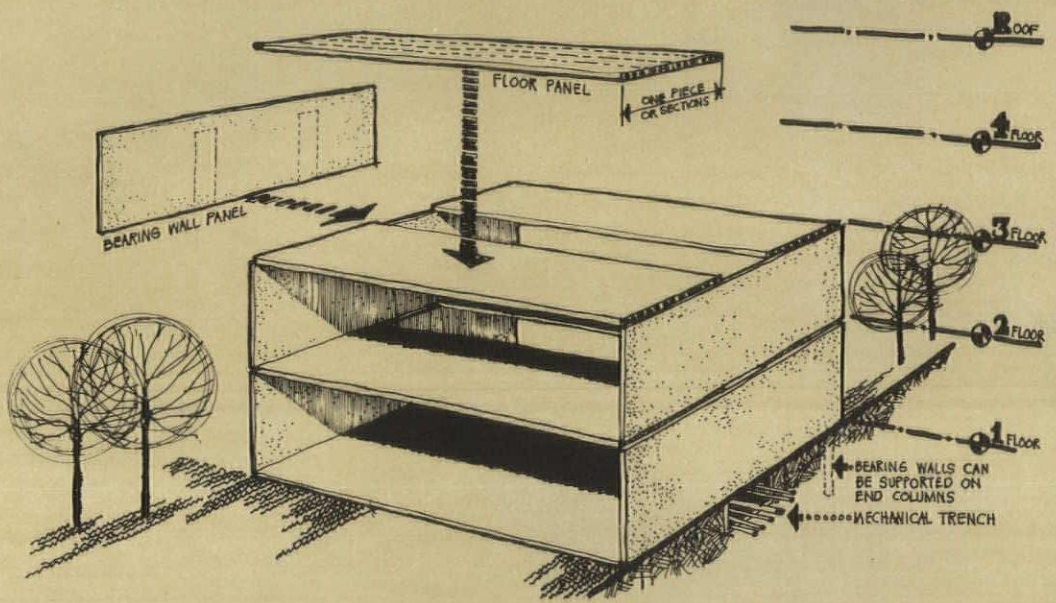




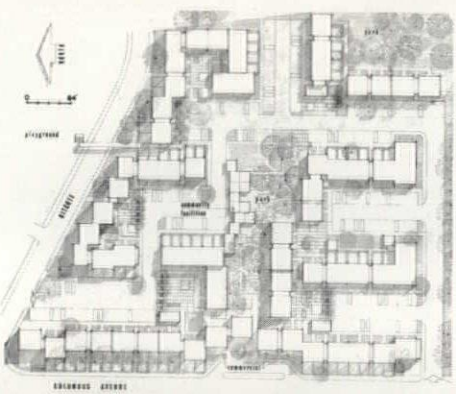


CONCRETE BEARING WALL + GIRDER PANELS



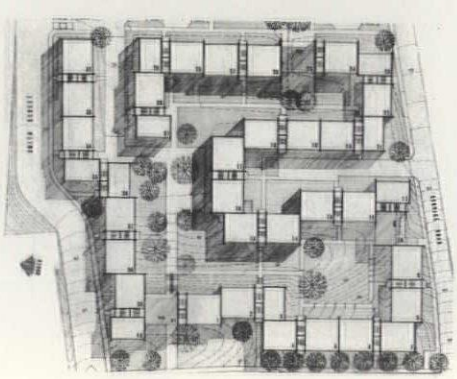


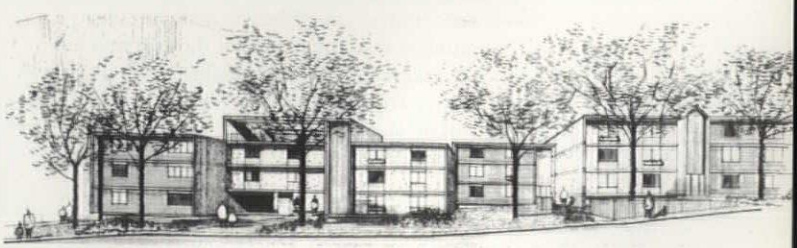
PROTOTYPE 1:
202 units in the form of flats, duplexes, row houses on a steeply sloping site. Net density 40 dwelling units per acre. Curtain walls of steel.





PROTOTYPE 2:
120 units—all flats—on two-level site. Density 30 units per acre. All of the buildings are three stories high, with stucco curtain walls.











CHAPMAN

GOYETTE

MONACELLI

CITATION

residential planning

ALLAN CHAPMAN &
HAROLD L. GOYETTE,
ARCHITECTS AND PLANNERS

THEODORE MONACELLI,
ASSOCIATE

SOUZA & TRUE,
STRUCTURAL ENGINEERS

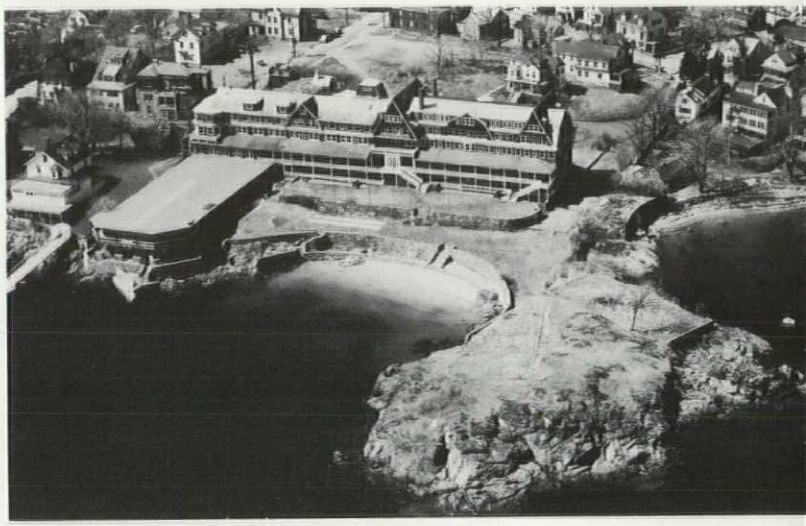
PETERSON ASSOCIATES, INC.,
MECHANICAL ENGINEERS

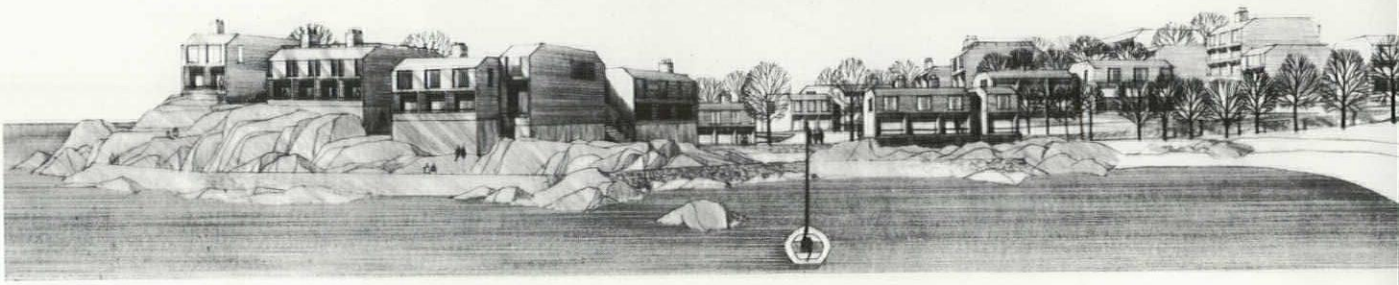
PROJECT: Glover Landing, Marblehead, Massachusetts, for Glover Landing Company. R. W. Bachelder, S. R. Brainard, Trustees.

SITE: Five-acre harbor front presently partly occupied by a resort hotel.

PROGRAM REQUIREMENTS: Hotel to be removed and area to be redeveloped for residential use, including, specifically, 140 apartments, 210 car parking spaces, a community swimming pool and boating facilities.

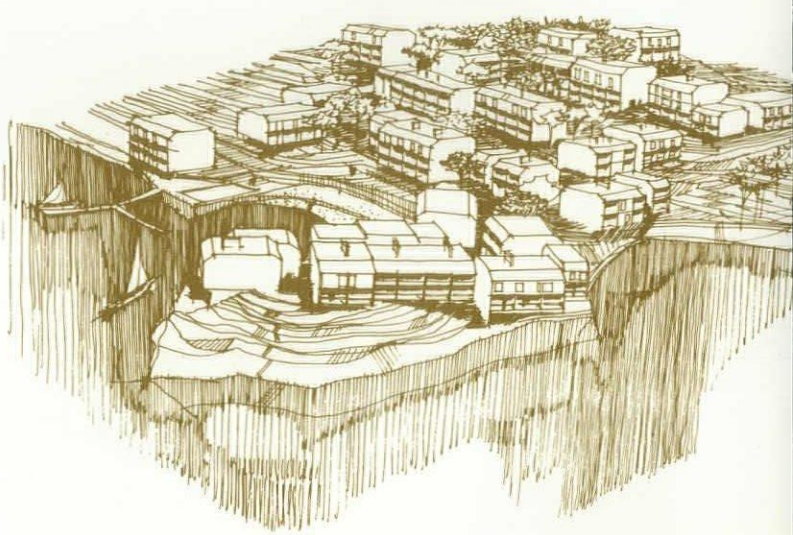
DESIGN SOLUTION: A village complex in which building heights have been kept to 40 ft, in accordance with town zoning restrictions. In addition, the architects wished to: (a) recall the environment of Marblehead 'Old Town'; (b) make use of smaller residential units which would conform more readily to the existing topography; (c) relate the structures to the commanding views of Marblehead Harbor; (d) make maximum use of the prevailing breezes; (e) create yards and terraces within the developed area; (f) minimize the impact of the automobile within the residential complex.

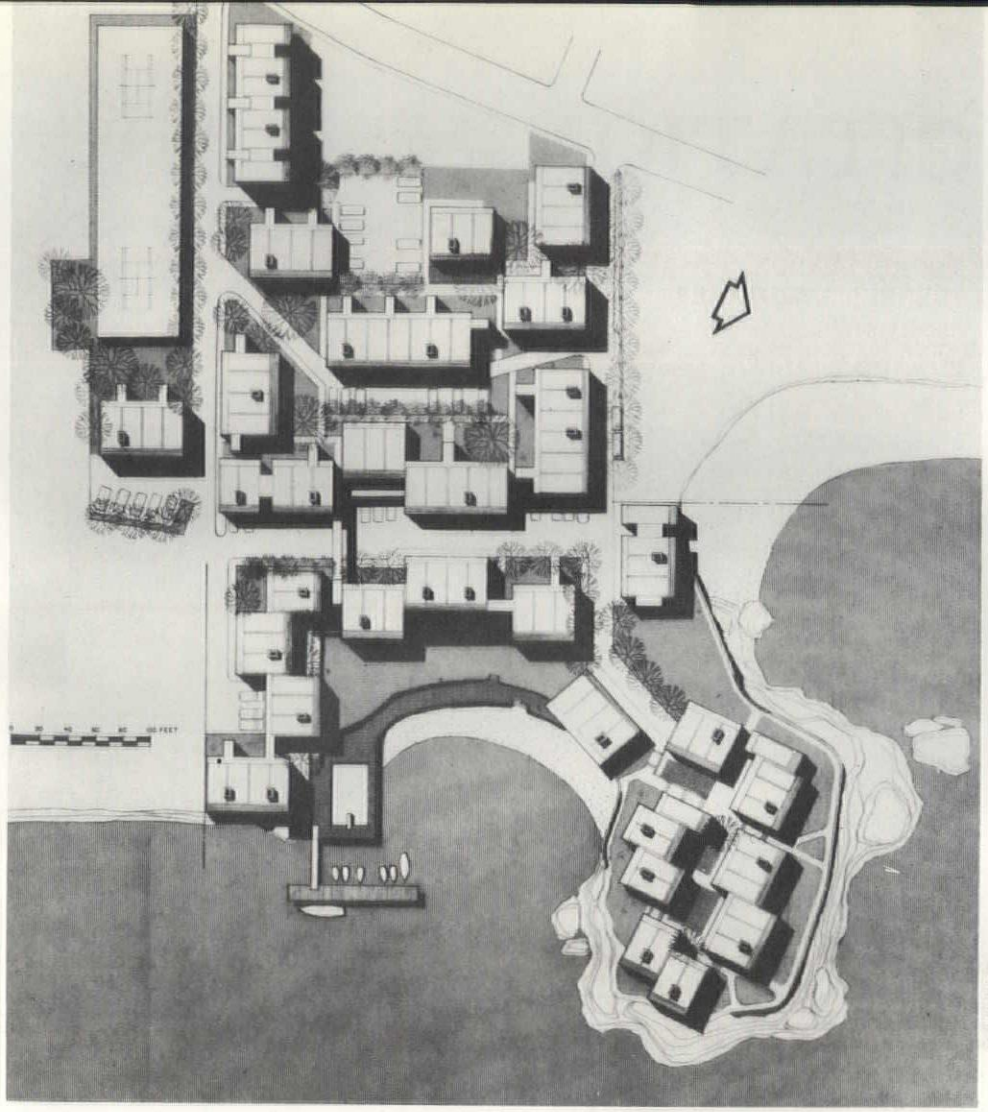


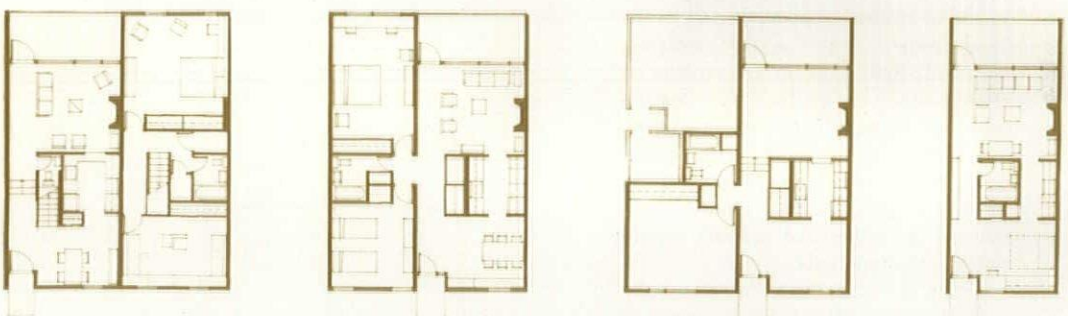


CONSTRUCTION AND MATERIALS: The buildings will be essentially of frame construction, utilizing masonry for foundation, retaining, and fire walls. The existing stone retaining walls are to be maintained. Light and standard construction methods and materials have been chosen in order to maintain the intimate residential scale of the area and to make use of local, available labor.

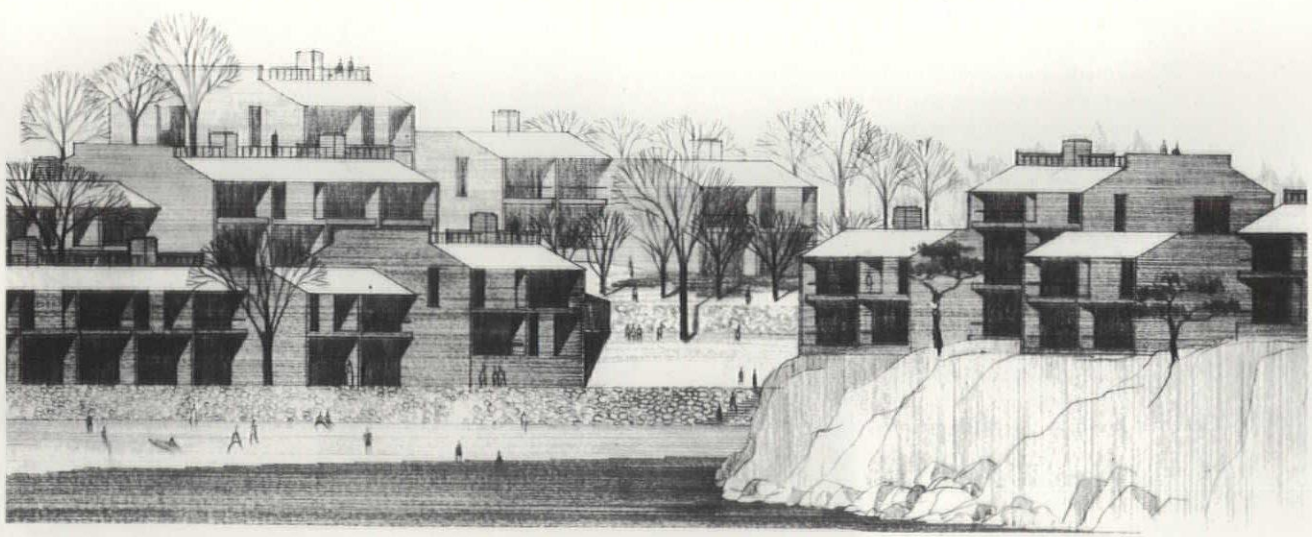
JURY COMMENTS: New construction within an old framework, staying well within the general scale and frame of the area. . . . Very sensitive project, yet successfully avoids being too picturesque. . . . Done in the most modest way, a virtue that must be recognized.





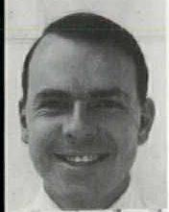


two-bedroom duplex *two-bedroom flat* *one-bedroom flat* *studio*

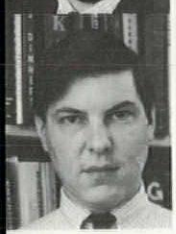












MOORE

LYNDON

TURNBULL

WHITAKER

MORREAU

CITATION

residential design

MOORE, LYNDON,
TURNBULL, WHITAKER,
ARCHITECTS

EDWARD B. ALLEN, ASSOCIATE

LAWRENCE HALPRIN
& ASSOCIATES,
LANDSCAPE ARCHITECTS

DAVIS & MORREAU,
STRUCTURAL ENGINEERS

SARLES, BRELJE & RACE,
CIVIL ENGINEERS

RICHARD CHYLINSKI,
WIND TUNNEL STUDIES

PROJECT: Condominium on the Sea Ranch, Gualala, California, for Oceanic Properties, Inc.

SITE: 5000-acre sheep ranch north of San Francisco, bordering 10 miles of picturesque coastline.

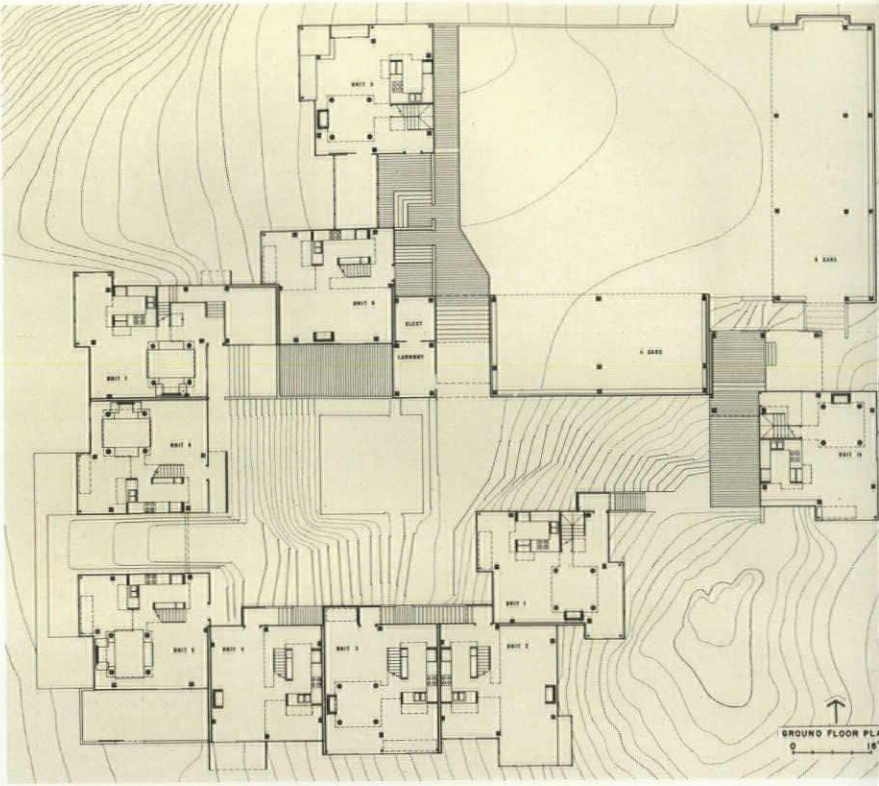
PROGRAM REQUIREMENTS: To develop the site for vacation houses without destroying its natural beauty. Thirty-five acres between road and sea to have condominium units.

DESIGN SOLUTION: Living units are tightly clustered, so as to leave most of the site open. Ten units—each a 24-ft cube—are to be built first to serve as a model for subsequent clusters. Cars are parked around a walled compound, and units closely packed around a wind-protected courtyard. Some have private gardens or greenhouses and all face the coastal panorama as well. There are few openings in the houses, except for numerous skylights that serve to admit as much sunlight as possible. Bay windows, terraces, decks and walled gardens are all outside the basic cube.

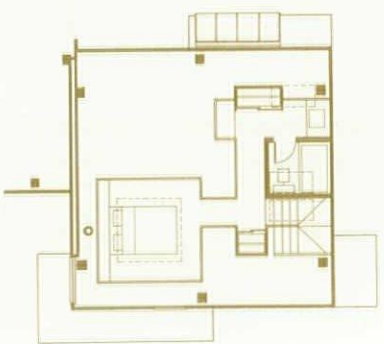
Within the cube, the architects sought "to make powerful and exciting spaces," appropriate for a holiday and consciously distinct from the familiar home, but "with a strong sense of enclosure . . . into the enclosure go further enclosures: one is a two-story box with kitchen below and bathroom-dressing room above; the other is a four-poster, like the four-poster around the hearth of a primitive pit building. The hearth goes between these posts; above it is a skylight sleeping space over which a canvas can be lowered for visual privacy."

MATERIALS AND CONSTRUCTION: The enclosure is made with heavy barn frame of rough 10″ x 10″ posts, rough 4″ x 10″ girts, and 4″ x 4″ braces with rough 2″ x 8″ boards nailed vertically.

JURY COMMENTS: Clustering of houses leaves big open spaces. . . . Holiday houses with much personality. . . . Solid-knit, cohesive plan.



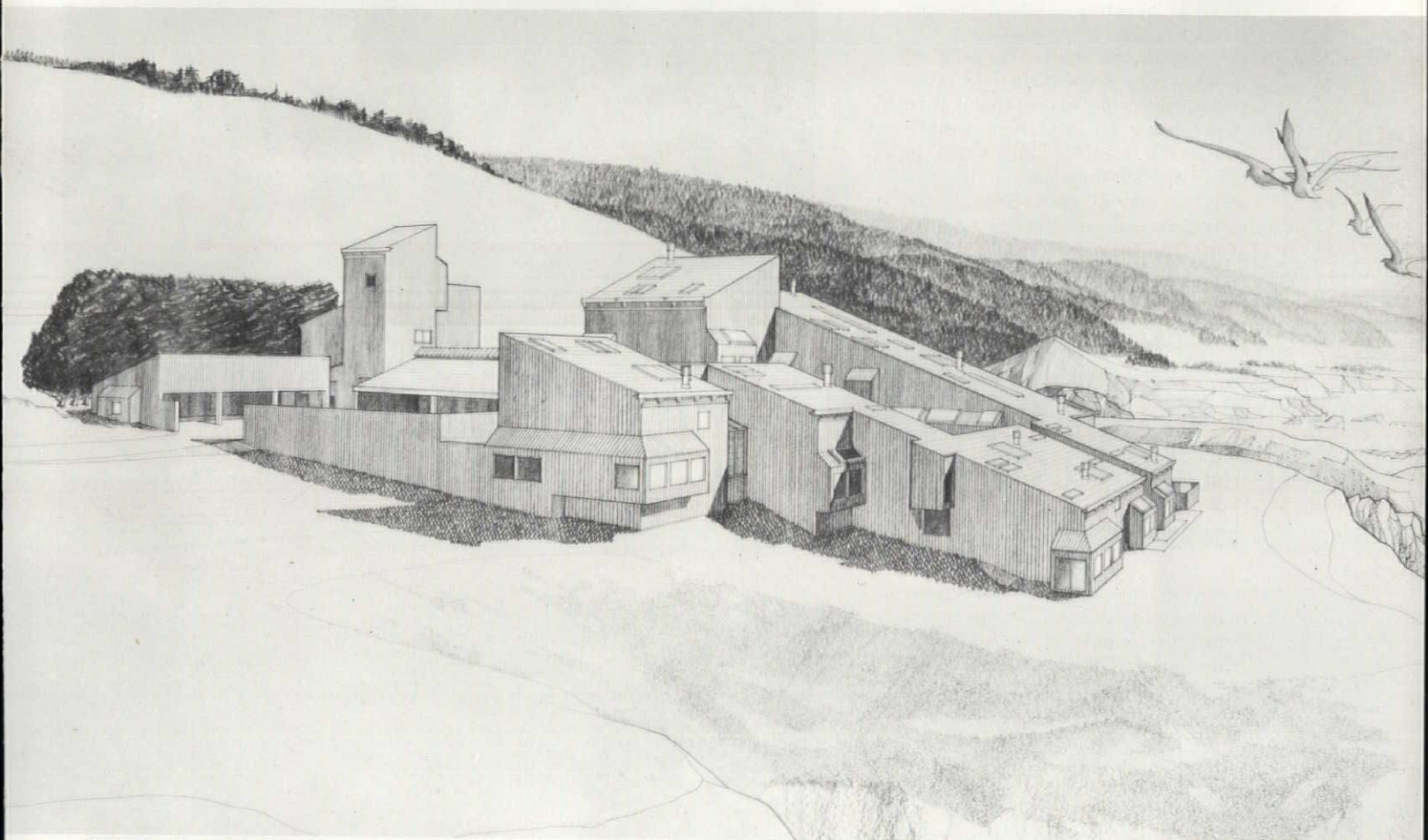
ground-floor plan of first, ten-unit cluster



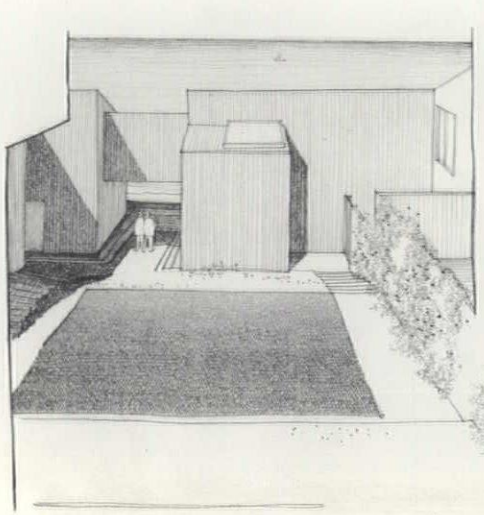


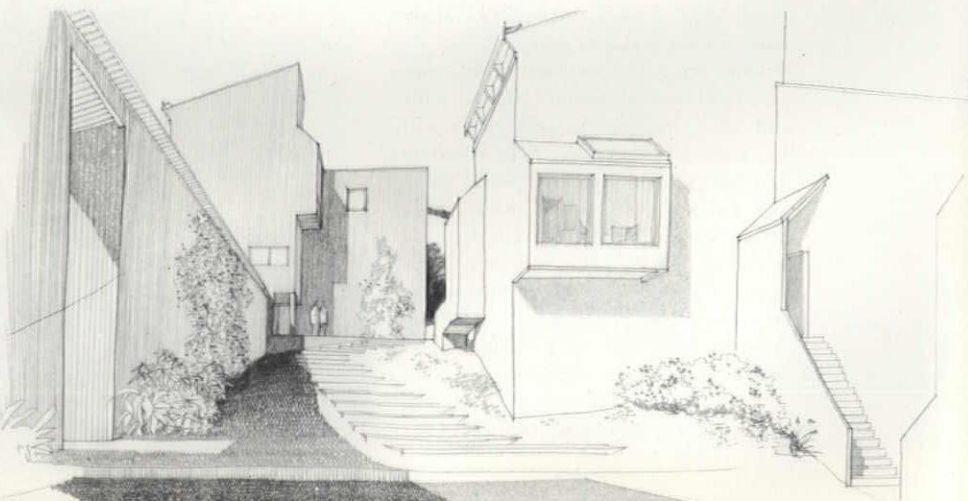






RENDERING: MARVIN H. BUCHANAN







SAUER

CITATION

residential design

LOUIS SAUER, ARCHITECT

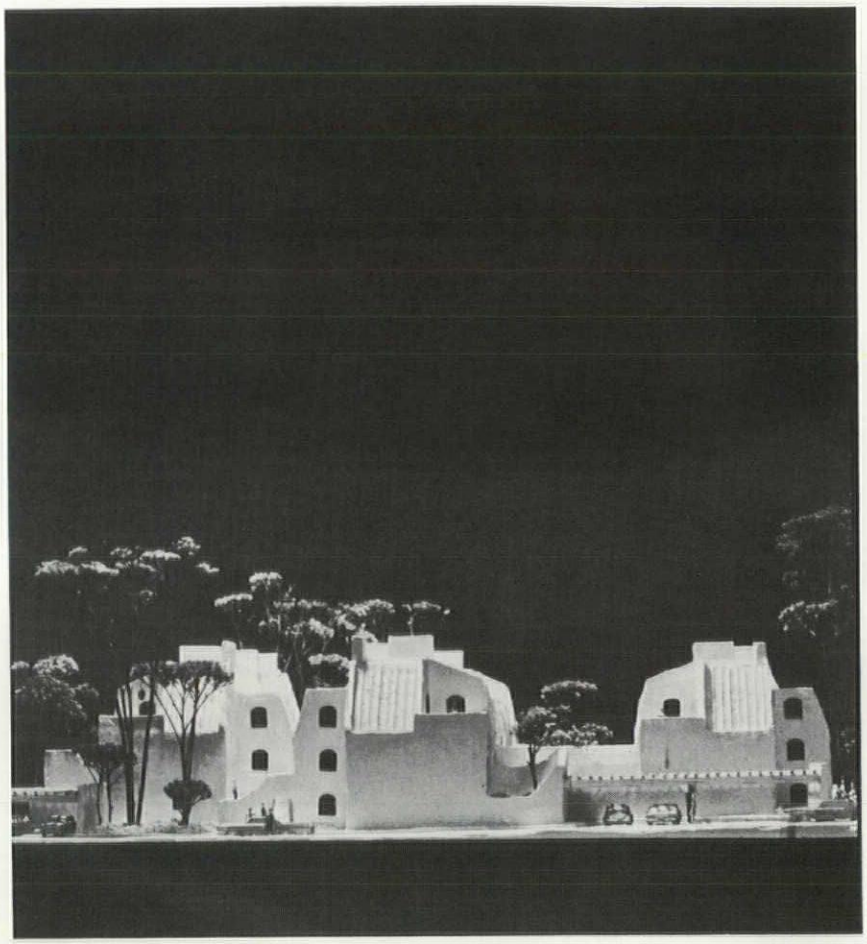
DAVID MARSHALL,
PROJECT ASSISTANT

ADLEMAN, COLLINS & DU TOT,
LANDSCAPE ARCHITECTS

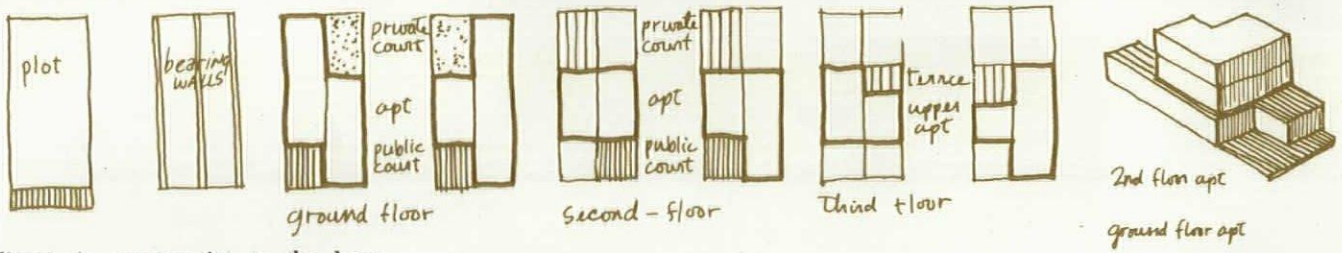
FRED SCHWARZ,
MECHANICAL ENGINEER

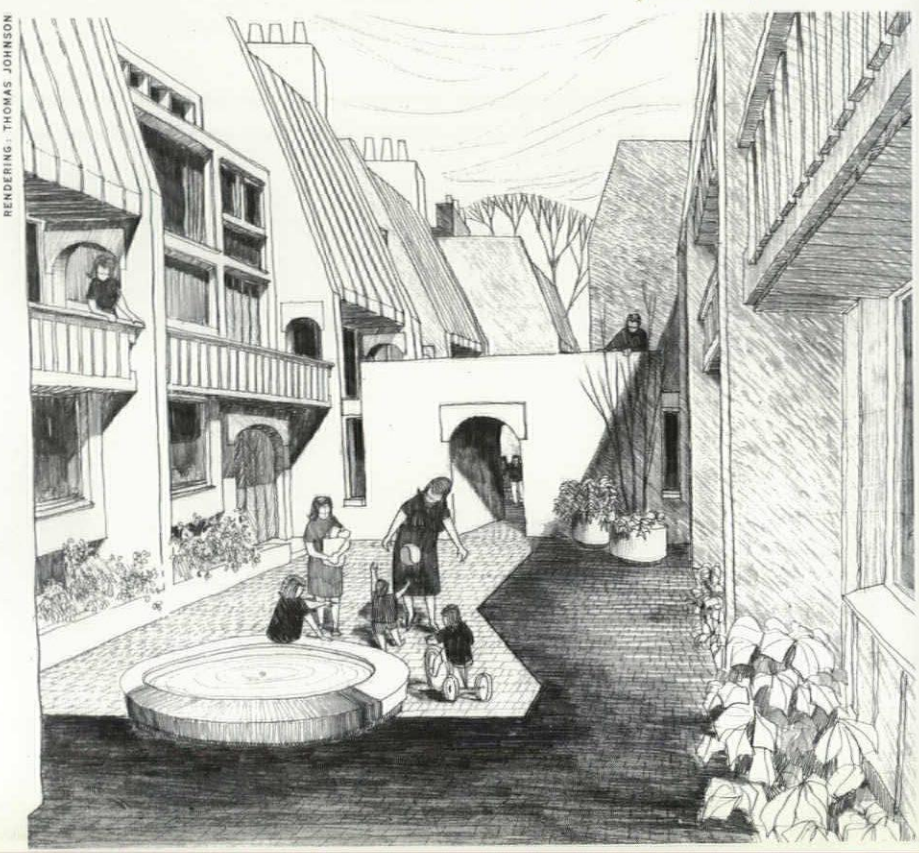
JACK MASSEY & DON AQUILINO,
PAINTERS

PROJECT: Pastorius Mews for Betsy Ross Corporation, Philadelphia, Pennsylvania.
SITE: Three lots (*one shown opposite page*) within a residential block with stately 19th-Century mansions, now converted into apartment houses.
PROGRAM REQUIREMENTS: To build 60 dwelling units of one-, two-, and three-bedroom size. Off-street parking is to be provided at a 1:1 ratio. New construction is not to exceed three stories in height, and $8000 per unit.
DESIGN SOLUTION: Preservation of the existing environment through retention of the large houses, trees and landscaping. To distinguish the older residential order from present-day residential and economic patterns, the new development is to be small in scale, repetitive, and linear, in counterpoint to the large, widely-spaced mansions. New apartment construction is to be of two basic plan-types—in Z or T form—and these are to be variously placed on a 24′ x 52′ site plan grid, upon which a structural grid of bearing walls, 12 ft o.c., is further imposed. Within this matrix, a ground-level apartment will have its own private court, directly accessible from a public space. Above this level are duplex units. Some of these are reached from an elevated public terrace (*right*); others have interior stairs to ground level.
CONSTRUCTION AND MATERIALS: Structure is to be of cement masonry bearing walls and wood framing. Exterior walls will be stucco in colors chosen by architect and two painters; roofs of metal; walks and public courts to be brick-paved; private courts, flagstone-surfaced.
JURY COMMENTS: The scheme's great virtue is that it is absolutely urban.... Nice sequence of events.... Meeting between roofs and walls offers opportunity for structural efficiency.

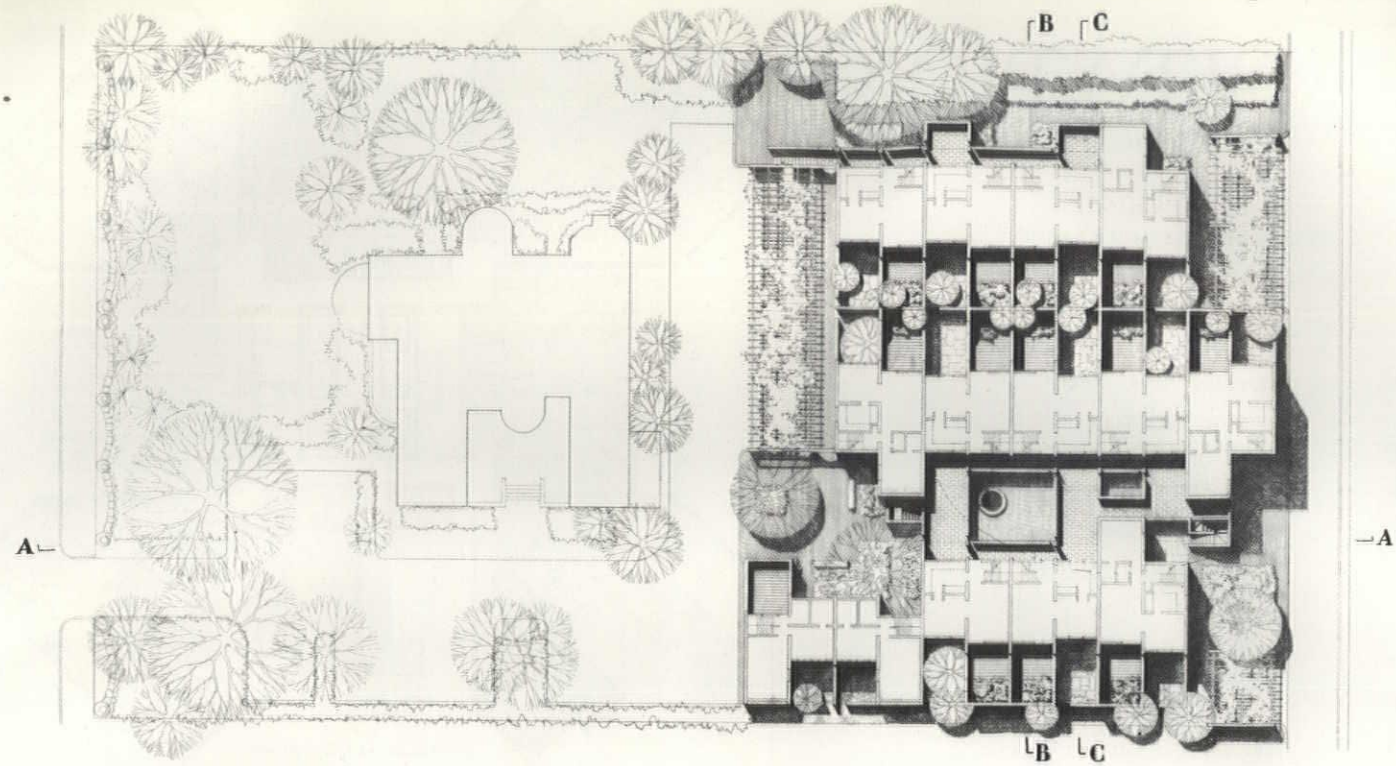


MODEL: ARLO BRAUN AND DIAN BOONE

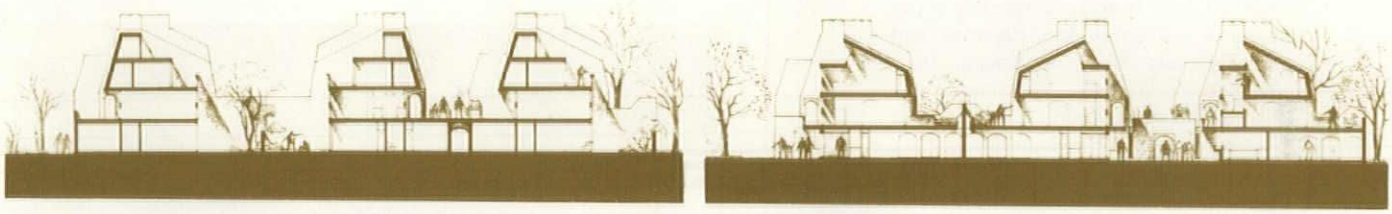


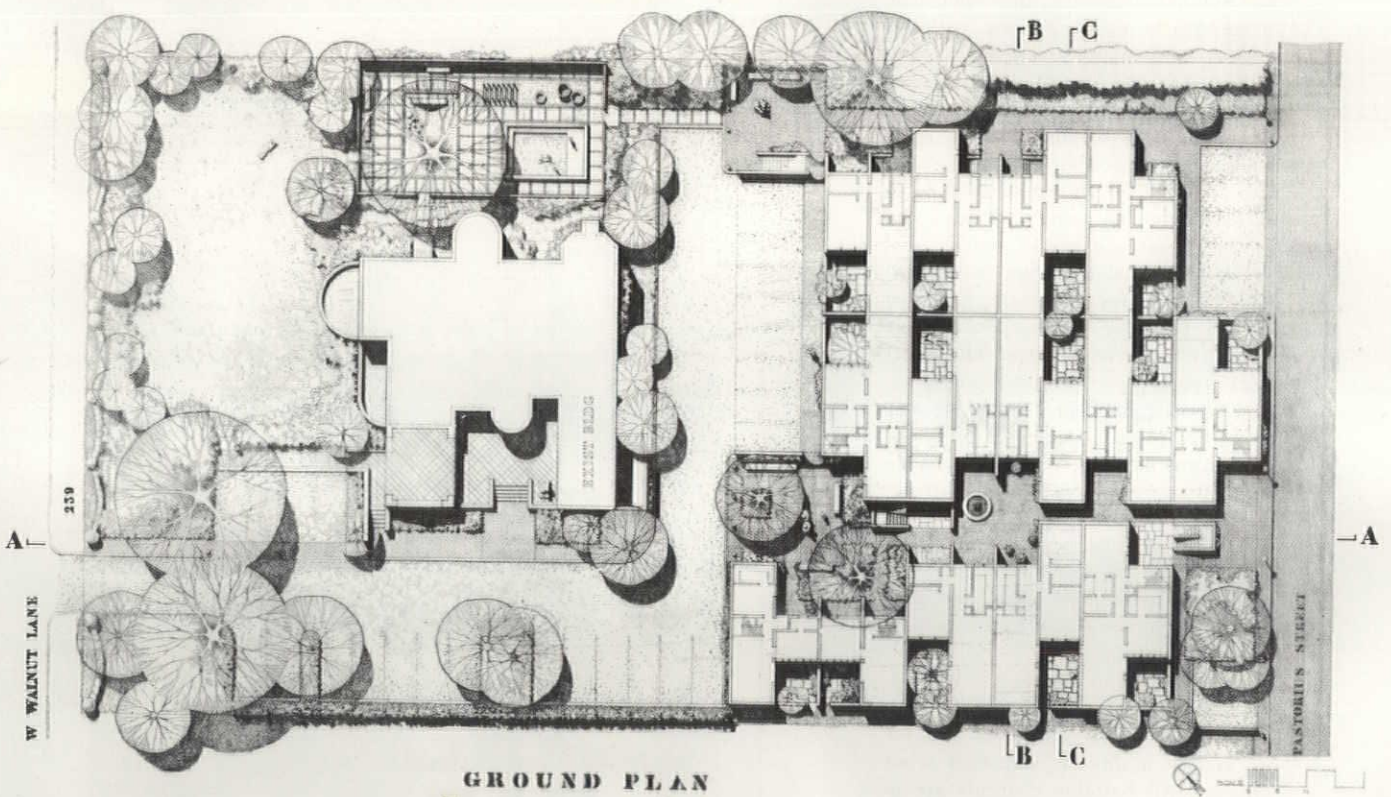


RENDERING: THOMAS JOHNSON



SECOND FLOOR PLAN





GROUND PLAN









GRUZEN

GREENSTEIN

SAMTON

CITATION

residential design

KELLY & GRUZEN,
ARCHITECTS AND PLANNERS

JORDAN GRUZEN,
DIRECTOR OF DESIGN

S. ROBERT GREENSTEIN,
ASSOCIATE IN CHARGE

PETER SAMTON,
PROJECT DESIGNER

ROBERT GENCHEK,
DESIGN ASSISTANT

EDWARD KELBISCH,
DESIGN ASSISTANT

FARKAS & BARRON,
STRUCTURAL CONSULTANTS

COSENTINI ASSOCIATES,
MECHANICAL CONSULTANTS

PROJECT: Harbour House, St. George, Staten Island, New York, for Gulf States Land & Industries, Inc. Planning and Development: Webb & Knapp, Inc.; William Zeckendorf, Chairman of the Board; Maxwell Fader, Vice-President in Charge of the Development.

SITE: A 36-acre deteriorated waterfront property, adjacent to the ferry station, facing New York Harbor.

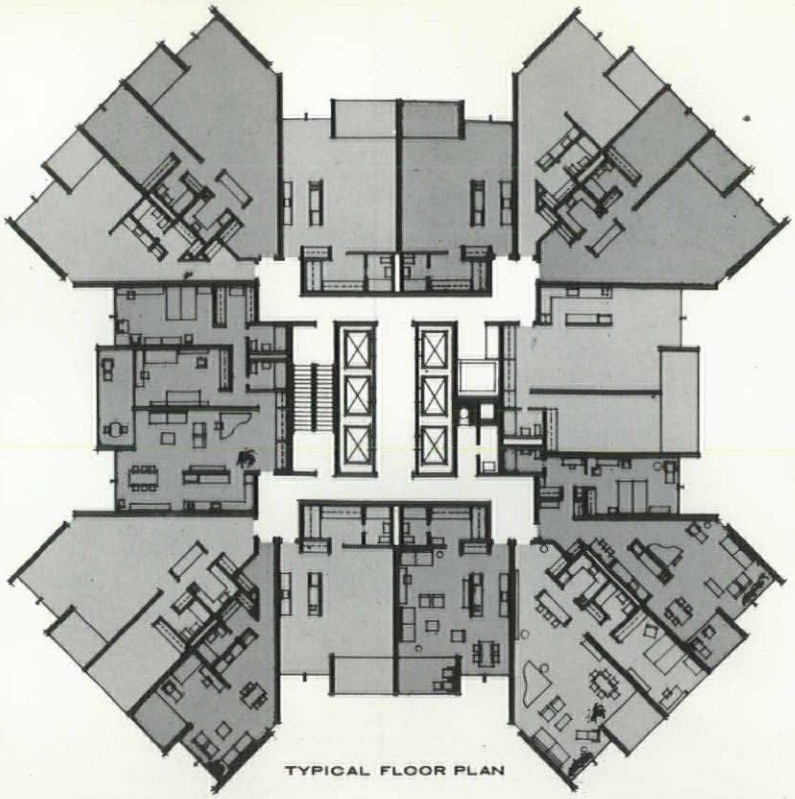
PROGRAM REQUIREMENTS: Redevelopment of the area to include housing, parking, commercial-shopping areas, and a park with marina and recreational facilities.

DESIGN SOLUTION: The following elements are part of this scheme: 4000 dwelling units; 80,000 sq ft commercial area; parking for 2800 cars; 10.2 acres of recreation and parks; 10 acres for marina, plazas and garden courts.

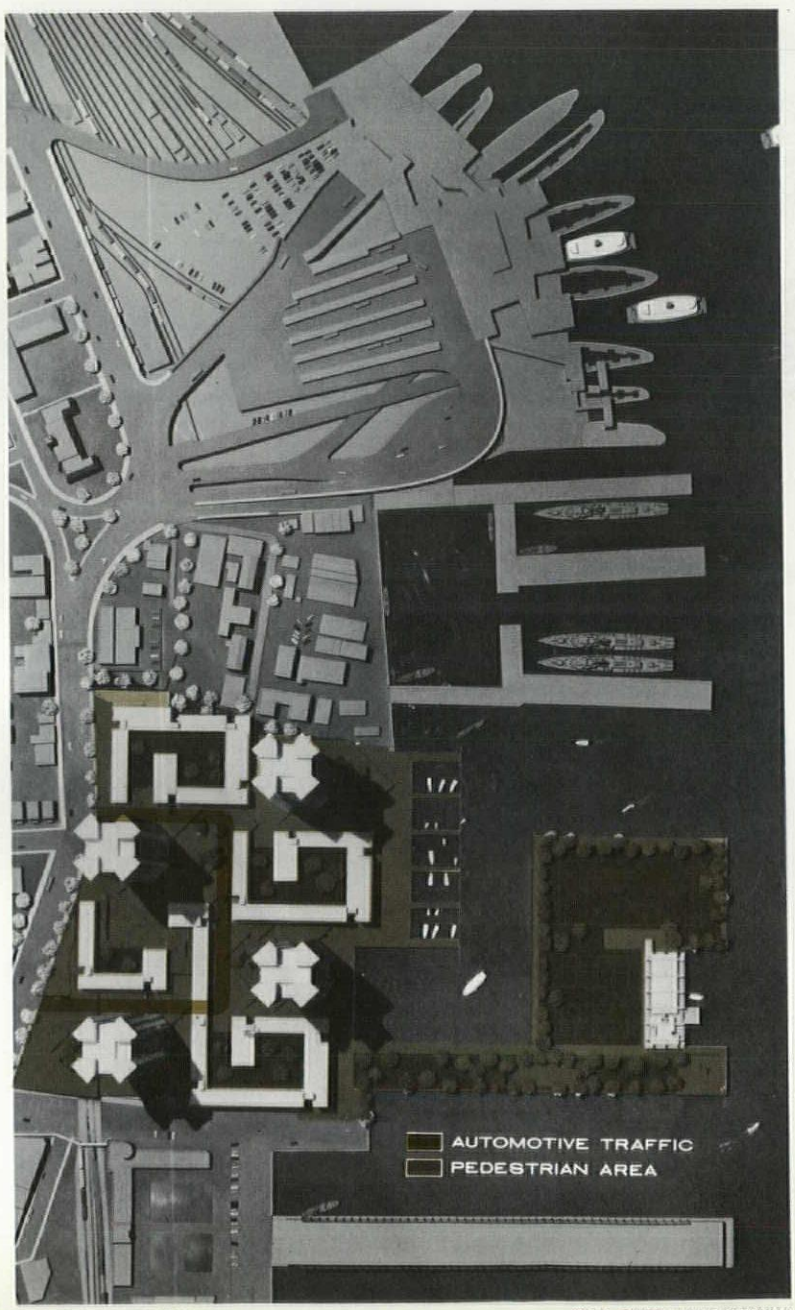
The residential units are to be contained in four towers averaging 54 floors, and in four low-rise complexes from three to nine stories in height. The apartment towers are octagonal in plan, offering maximum open space, air and light, exceptional structural stability, through-ventilation, minimum corridor areas, flexibility of apartment distribution. Town houses contain the larger apartments. Because of the sloping site, most of these can be either walk-up or walk-down units. Both high- and low-rise units will rest on terraced slabs over existing railyards.

CONSTRUCTION AND MATERIALS: The octagonal shape of the high-rise apartment buildings was chosen in part for its greater ability to withstand wind pressure. All building elements are to be completely fireproof.

JURY COMMENTS: Use of tall buildings against low buildings very well handled. . . . These clusters of giant structures read well in the cityscape.



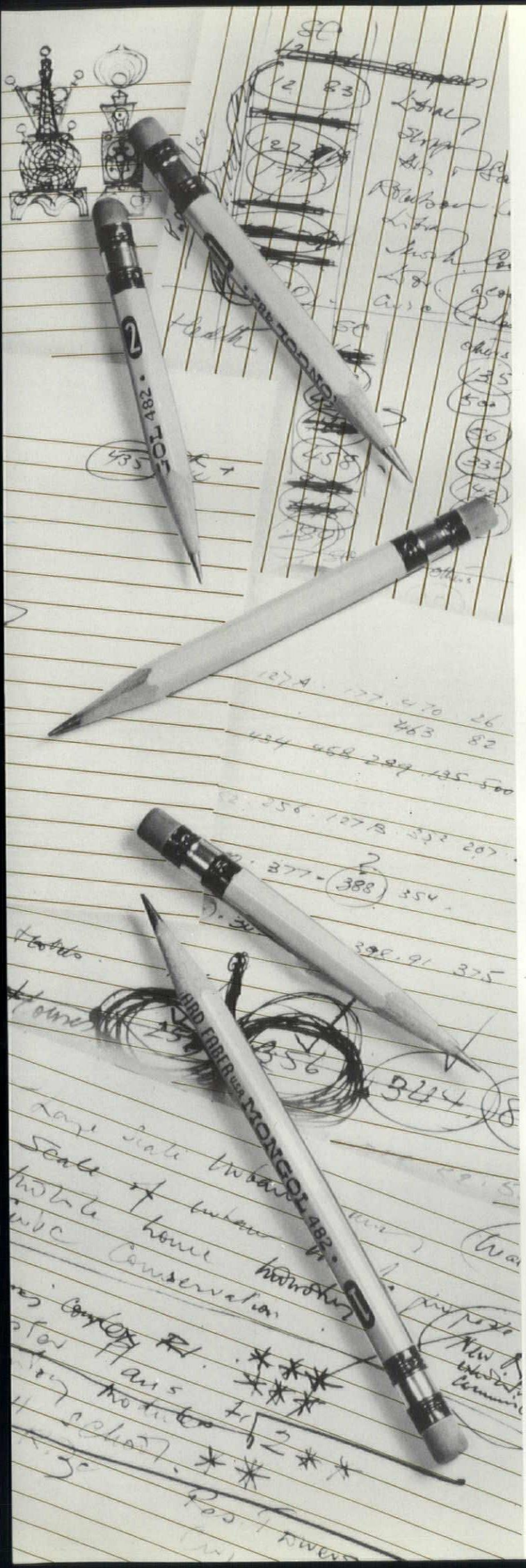
TYPICAL FLOOR PLAN



MODEL: NORMAN BRISKMAN

MODEL PHOTO: LOUIS CHECKMAN





JURY DISCUSSION

Lack of Design Discipline

The jury's comments on the premiated projects—presented on the preceding pages—indicate best the qualities they were seeking as they pored over the submissions. The most frequently mentioned failing among the other 627 entries was unnecessary complexity.

Kirk: The forms of many of the projects we've seen indicate that we are now getting a group of architects in practice who have been trained in a very exuberant approach to architecture. But they really haven't been able to assimilate it or control it. The works of Rudolph, Corbu, and Kahn are very forceful statements, but it takes a master to carry them off. I think we're seeing a lot of impositions and juxtapositions of their ideas thrown together by people who aren't sure how to combine them. They seem to think complication is going to make their designs more beautiful. Discipline is lacking. All of us here must be concerned about this, because these are the things we have weeded out one after the other. **Obata:** There were many solutions in which the architect was just looking for "expression" without any relation to the program or the spaces inside the building. They were as bad, in another way, as the period we've just gone through, when we had uniform exterior envelopes unrelated to what was inside. **Kirk:** Why can't architects do architecture simply? Why can't a guy just conscientiously review his work and say, "Am I really making an honest, simple statement of the function of this building, of these materials, site, and program?" If we drive this idea home time and time again, we could get decent architecture.

The Case of Religious Buildings

Out of the 59 submissions in the religion category, the jury selected only one. As usual, this entire category presented a dazzling display of unbridled imagination. It generated little serious discussion, but one exchange overheard at the jury table sums up the reaction.

Chermayeff: It's often said that the church is the only free theme for architectural expression left to man. The trouble is that it's too damn free. **Kaufmann:** The trouble is that it's left to man.

Creative Engineering Neglected

The engineer on the jury found few signs of creative thinking in his particular area of concern.

Zetlin: It's very distressing to me to see, in most of these 643 projects, not only a failure to utilize the potentialities of structural engineering, but an obvious lack of understanding about what engineering is. These projects could have offered a tremendous range of structural possibilities. But even in those groups where structural design could have contributed to economy—in apartments, office buildings, other commercial projects—structure has hardly been considered. Even in sub-

missions that showed some consideration of structure, it led back to something that had been done before, rather than looking forward to new possibilities. There were a few isolated positive examples. I think the overpass we selected is an attempt; the prefabricated housing system developed structural possibilities in a very minor way; a couple of high-rise office buildings were efforts in the right direction. Where is the architect's inventiveness? I don't think inventiveness can come into play without an understanding—if not of engineering itself—at least of its potentialities. Engineering is not a limited field of beams and columns and other established systems. It could be more creative, not only in providing spaces, but even in solving aesthetic problems.

Is the Single-Family House a Challenge?

As noted in the Introduction, this was the first year since the Program was started that no single-family house received recognition. The general low quality of the entries led to a discussion of their significance as architectural problems and their place in this competition.

Chermayeff: Here is the biggest group of submissions, the single-family house, which gives us an excellent view of the up-and-coming young architect. And what is the up-and-coming young architect doing? He's digging the grave of the profession deeper and deeper. I really think we should say something about it, because it is bunk. It has nothing to do with the humble notion of creating background for people. One after another, we have seen exhibition pavilions of the crassest, vulgarest, stupidest kind. **Kirk:** I think the guys who submitted houses to this program designed them for some unknown thing that doesn't relate to people and the way people use a house. I wonder if a Program like this doesn't incite such a result. **Zetlin:** That depends on the awards, on whether awards go to deserving projects. **Kirk:** But what does this stuff look like? This one looks like a house by Charles Moore, who won an award last year. It doesn't matter whether his project deserved it. By awarding in a certain direction, don't you stimulate too many guys to fall into a certain trap? Of course, to be hard-boiled about it, this is going to happen anyway; you might as well bring it forth and let them fall and get it over with. If a guy doesn't have the integrity to make his own statement, there's no reason why you have to be a godfather or something. **Kaufmann:** I think what you're all saying is based on a false premise: that things used to be better. There has always been a great deal of bad work and this is a big country. The jury has to accept the idea that it's going to see a lot of trash. **Kirk:** But can you look at this stuff and think of anybody living in it? **Chermayeff:** In the first place, if you put two or more people into most of these houses, they'd go mad: no privacy at all. **Obata:** We've gone through 148 houses, and we haven't picked one. I'm wondering if they're worth getting. Looking back on your past competitions, Jan, do you feel that the houses have made a significant contribution? **Rowan:** Every other year they've picked at least one or two houses. **Chermayeff:** I don't think there's much point in committing yourselves to this sort of exercise, which is abundantly looked after by so many house and home and garden kind of publications. It's not a problem at all to design some little custom-built notion of your private palace for some remote valley. It's just not a problem. The overwhelming problem that is coming up is how to live with high densities and close proximities without losing your humanity. So why not commit your magazine to a priority problem now. It's high time for a priority to emerge. When everybody is trying to look after everything, it adds up to nothing. **Kirk:** It's a crime how little good housing there is. I think you should accent it in your publication, because this really is the problem—the community problem, not these individual things. **Kaufmann:** What you gentlemen have just been saying can't be questioned. But I do question whether this annual review of freely submitted projects is the place to put this emphasis. I think you could properly plan the issues over the year to make this point. Let the jury editorialize as much as it feels necessary, but let the profession send in whatever it wants to send.

Problem of Judging Urban Design

Having questioned the pertinence of single-family houses in the Awards Program, the jury took up a category at the opposite end of the scale in both size and complexity—urban design. Whereas houses had been considered an insufficient challenge for the designer, urban design projects were considered too great a challenge for the jury in the limited time available to them.

Kirk: I think this Awards Program is getting so big that there is a problem as to whether we are picking the right work—whether we can get a chance to really analyze. I wonder first of all about the large things we've discussed—the urban renewal projects and other big development projects that take an architect a couple of years to do; it's ridiculous to ask anyone to analyze them in 10 or 20 minutes. I think this part of your Program should be terminated. **Chermayeff:** I agree that the city planning category is not susceptible to this type of jury treatment and should not be in this Program at all. If you want to analyze it in the course of the year in whole issues of the magazine, then you could document the hell out of it and everything would be perfectly clear. It can't be judged off the top of one's head, especially when you're tired after looking at 150 wretched little houses. You can't suddenly jump from there to grand concepts. **Kaufmann:** I think perhaps the real difference is between redevelopment of existing settings and planning on an empty or almost empty site—whether it's rural or urban. If I look at a whole college campus that's being started from scratch, I'm able to have an opinion. It may not be intelligent, but at least it's a reaction. If I look at a plan for downtown Baltimore, I'm sunk. I'd have to take into account things like traffic, economics, existing buildings, existing centers of activity, and integrate all that with the new things. It's another order of problem. **Chermayeff:** Here are a couple of projects

where it says they're going to destroy nothing, simply reconstruct—really accepting the existing town and making each place a little more tangible. This has absolutely nothing to do with starting new on virgin ground. As Edgar says, I think you've lumped two different things into the same category—very confusing. Conservation might be a category in itself. **Rowan:** If you want to give a citation or award, you can give it for any reason you wish. **Chermayeff:** But anybody who had not been to this place would have no comment to make that would be of the slightest value. So why put it in? **Rowan:** This is a difficulty, I agree. But I don't think you can ignore all this material. The profession is working on it. It is part of the architect's problem. Previous juries have judged as best they could. They first looked for some kind of strong physical structure; if that was present, then they would go a little deeper and see whether it made sense. **Chermayeff:** I have a certain objection to that approach. If you start in with this very serious subject matter and make it all subject to jury comment, we'll just turn into von Eckhardts—he descends on Boston, gives it the once-over, and then tells people he can't see the value of it all unless the whole city is moved six feet to the left. This procedure is dangerous, because architects are awfully arrogant already. We accept complex commissions way beyond our capacity. If a jury is flippant about these things, it makes matters worse. This is not the way to tackle the problem. **Kaufmann:** I think there is a precedent for this kind of problem with juries: when you get an extremely complex situation, you ask that the jury be guided through the problem by an expert. You don't accept the judgment of the expert, but you get to understand the problem a little better. **Rowan:** So far, we've usually had at least one jury member who was involved to some extent with planning, just as we have always tried to have an engineer. **Kirk:** I would say that even if you had a planning expert on the jury, he couldn't give a fair judgment of 20 cities laid out before him. What you're trying to judge in this program is conceptual ideas, and I don't think that it's possible in an area as complex as urban planning.

[*As a result of this discussion, the jury agreed to confine awards and citations to buildings and other self-contained architectural projects, such as the overpass. Projects of larger scale, with broader ramifications for the community, were set aside with a request that the Editors express their general reactions to them. Among the entries in this category, which drew favorable reactions from the jury, were several projects involving the rehabilitation of the central or original sections of cities. The jury was especially pleased with proposals to rehabilitate old structures, giving them new usefulness to the community without destroying their historical significance. The jury also selected a few smaller projects, with implications for the community as a whole, that they wished to be noted as commendable in principle. These included a pumping station concealed beneath a landscaped terrace, a carefully organized "mobile home" development, and a school that fitted into the terrain to preserve the dominance of an adjacent landmark. They also commented favorably on a proposal to place an entire medical school in a single building, which involved the creation of new plazas and the conversion of surrounding buildings to new uses. In all of these cases, they concluded that the relation of the project area to the rest of the city was the crucial measure of its success. This aspect, they felt, they could not fairly judge.*]

Encouraging Trends

Besides the commendable characteristics the jurors noted among urban design entries, they also found encouraging trends among the projects they premiated.

Kaufmann: The selections we have made and the categories into which they fall indicate that there may be a drift in architecture away from the wonderful isolated work toward a work in its setting—both physically and humanly, both in the landscape and in the community. These are among the most important considerations for the best architects, rather than just building beautifully. **Kirk:** As far as site planning is concerned, it is interesting to see people finally going back to the planning principles of the '20's and '30's—of projects such as Radburn and Chatham Hills, where pedestrian and auto traffic have been separated, human scale has been considered. The projects we picked here have spaces that will become human spaces, where people can meet people.

A New Design Category

Serge Chermayeff called attention to a whole new category of design, the emergence of which he considers significant.

Chermayeff: There is a new category emerging that is non-architectural, in the traditional sense of "architecture." We had one example among the winners—the aquarium—which I didn't comment on during the judging because my son is involved in it. It is really a new kind of building—partly an exhibition, partly a new type of civic space; it spills outside with no definite limits. It involves several specialized communications techniques—typography, graphics, lighting. It is *disembodied* architecture, in a sense. The contents are the architecture; there is no frozen, static container—no set-piece. This simultaneous work in many different idioms, previously thought of as separate fields—this new amalgam of design talents—is producing a new expression. This new world is really where the great architectural innovations may now be developed.





Photos: J. Alexander Studio

New

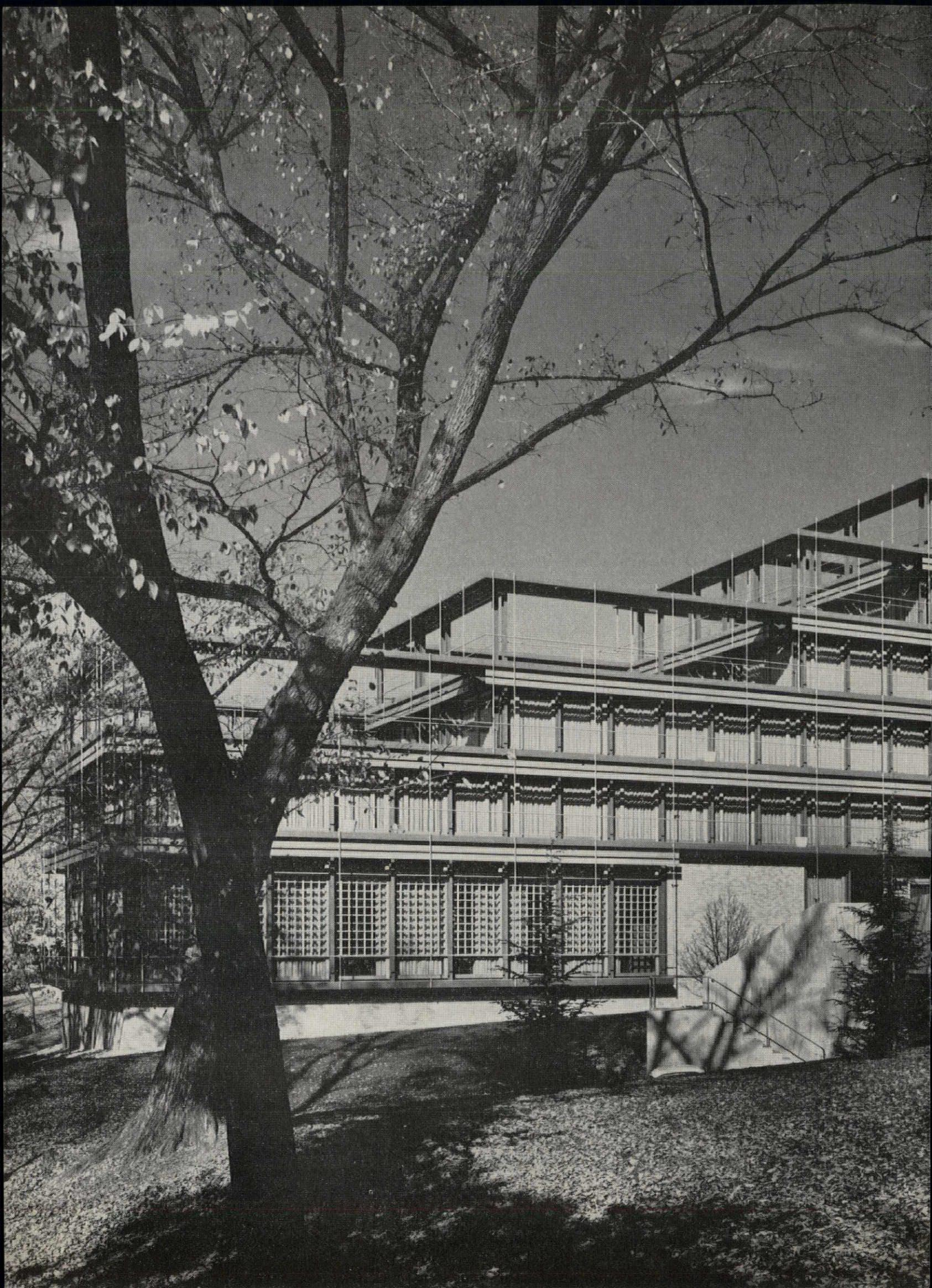
GERMAN EMBASSY

Brings German Architecture to Washington

Almost resembling an Erich Mendelsohn sketch come to life, the new United States Embassy of the Federal Republic of Germany has begun its diplomatic mission on a quiet tree-shaded hillside in Washington, D.C. Designed by Professor Egon Eiermann of Karlsruhe, the embassy is in direct line of spiritual succession to the great German modernists of the first quarter of this century who had such a profound influence on contemporary architecture.

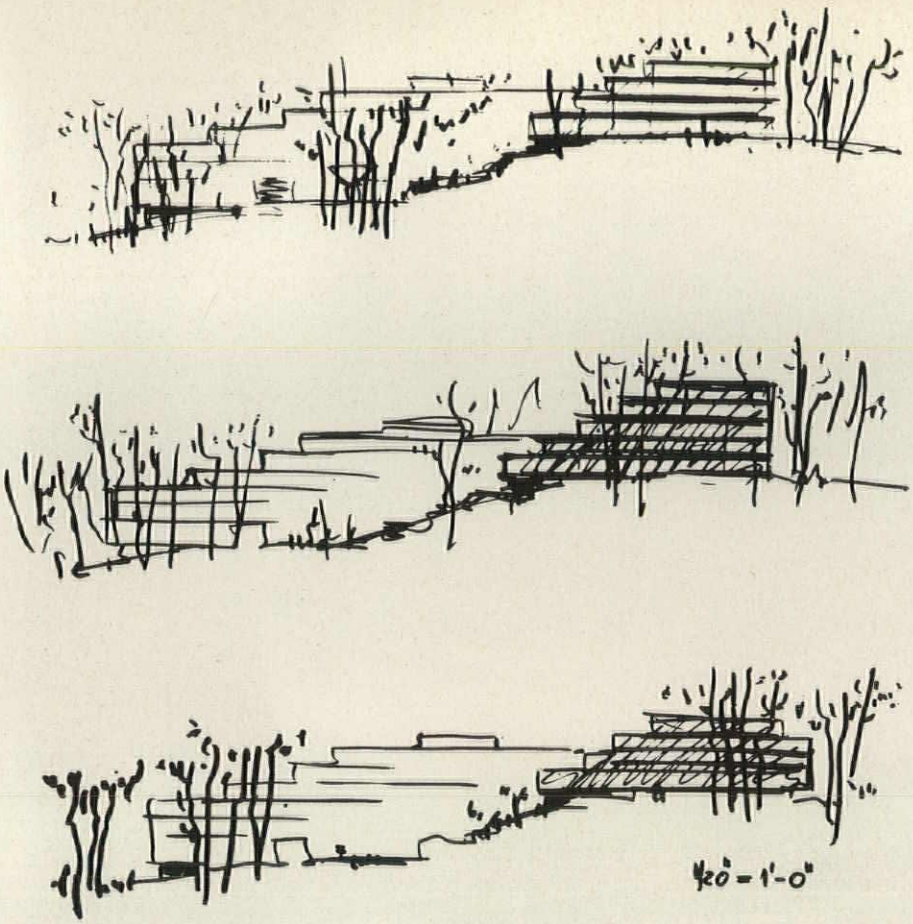
Eiermann, who also designed the Kaiser Wilhelm Memorial Church on the Kurfuerstendamm in West Berlin, has achieved in the new chancery a building of the requisite imposing and distinctive nature which at the same time respects the residential scale of its neighborhood. This has been done by making the building follow the lines up its site in a series of terraced setbacks; consequently, the end facing the residential street is only two stories high and 50 ft wide. The structure builds back from this base to a six-story height approximately three-quarters of the

Continued on page 174

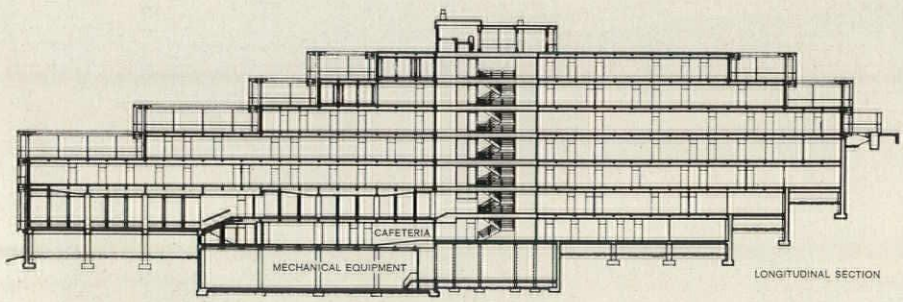




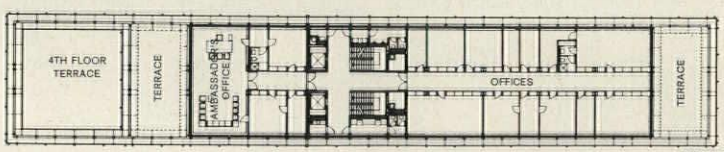
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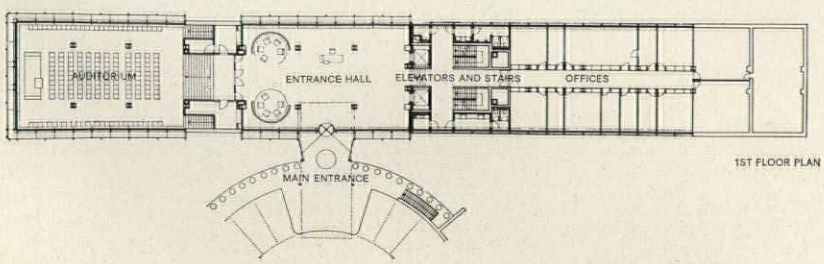
Eiermann's conceptual sketches for the embassy



LONGITUDINAL SECTION



5TH FLOOR PLAN



1ST FLOOR PLAN

way up the hill (a lower, seventh level contains the embassy cafeteria). At the rear, the building tapers off again in two terraces. Thus, the embassy repeats the natural form of its site and, through use of natural materials, colors, and planting, becomes smoothly integrated with its wooded surroundings.

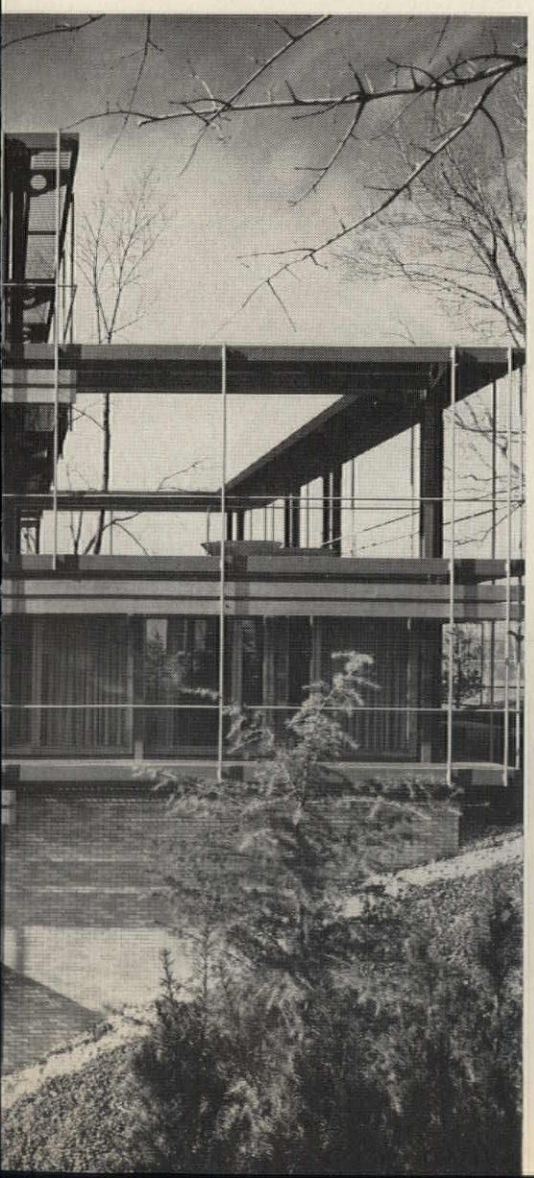
Structure of the building is exposed steel, painted dark gray. Surrounding the structural frame is a system of steel grating catwalks (for emergency egress from glass-walled offices) and a light steel tube frame supporting horizontal sunshades of light fir. (There is a visual reminder of Saarinen's Deere Building here.) The catwalks are also painted dark gray, the tubular supports light gray, and the fir shades and window frames are treated to preserve their light color; ground-floor walls are concrete faced with tan brick. The whole appearance is unexpectedly colorful to one who has seen the building only in black and white photographs, but it is a pleasing colorfulness, not a gaudy one. One cavil is that the effect is just a bit flimsy-looking, since the yellow boards and light gray tubes tend to appear as a "cage" around the more substantial main structure. As a future touch, Boston ivy will be trained to grow on the tubular steel.

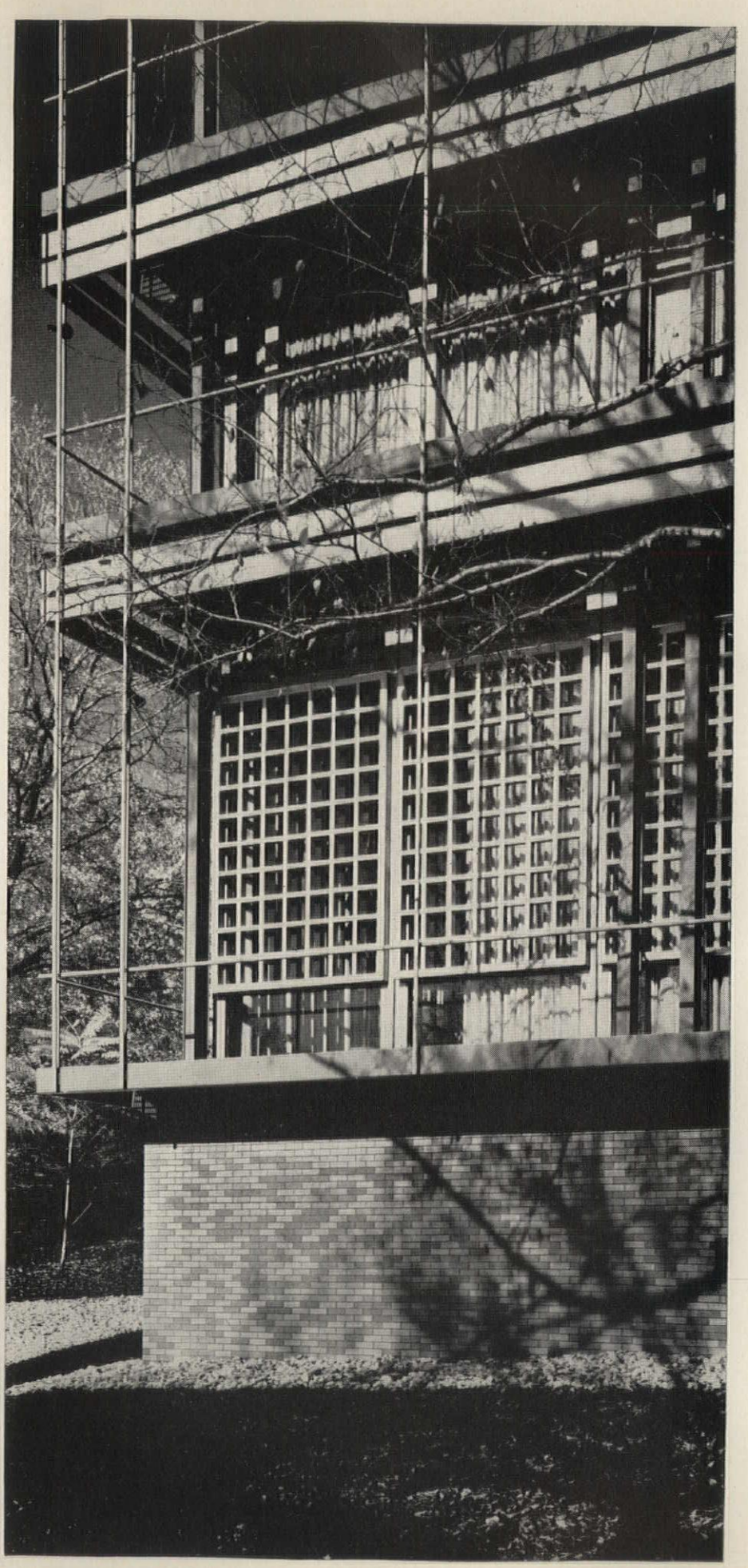
Public access to the chancery is past a gate house (not completed at this writing) to a circular unloading and parking area around a flagpole. Beneath this round area is an underground garage for the chancery staff, which is entered via a separate drive. (On-site hidden parking was another aim of Eiermann as a mark of respect for the neighbors.)

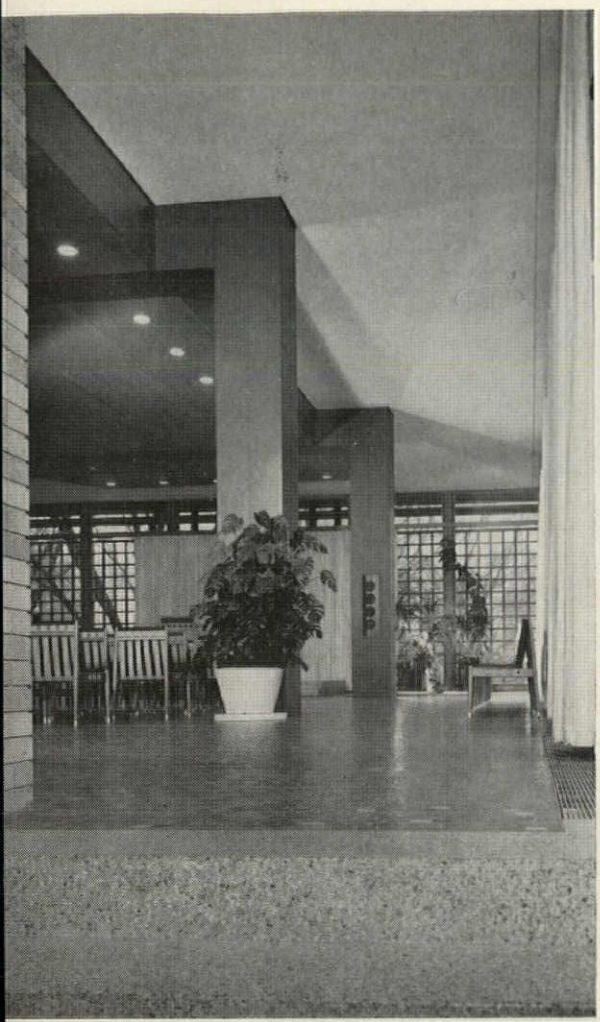
The entrance hall, auditorium, and other public spaces of the embassy repeat the exterior's use of warm-toned materials. The brick used on the ground-floor exterior is repeated on many interiors, and sun grilles of natural Douglas fir in the auditorium follow through with the fir sunshades used outside. Round ceramic floor tiles imported from Germany lighten or darken in shade according to the area of use (lighter

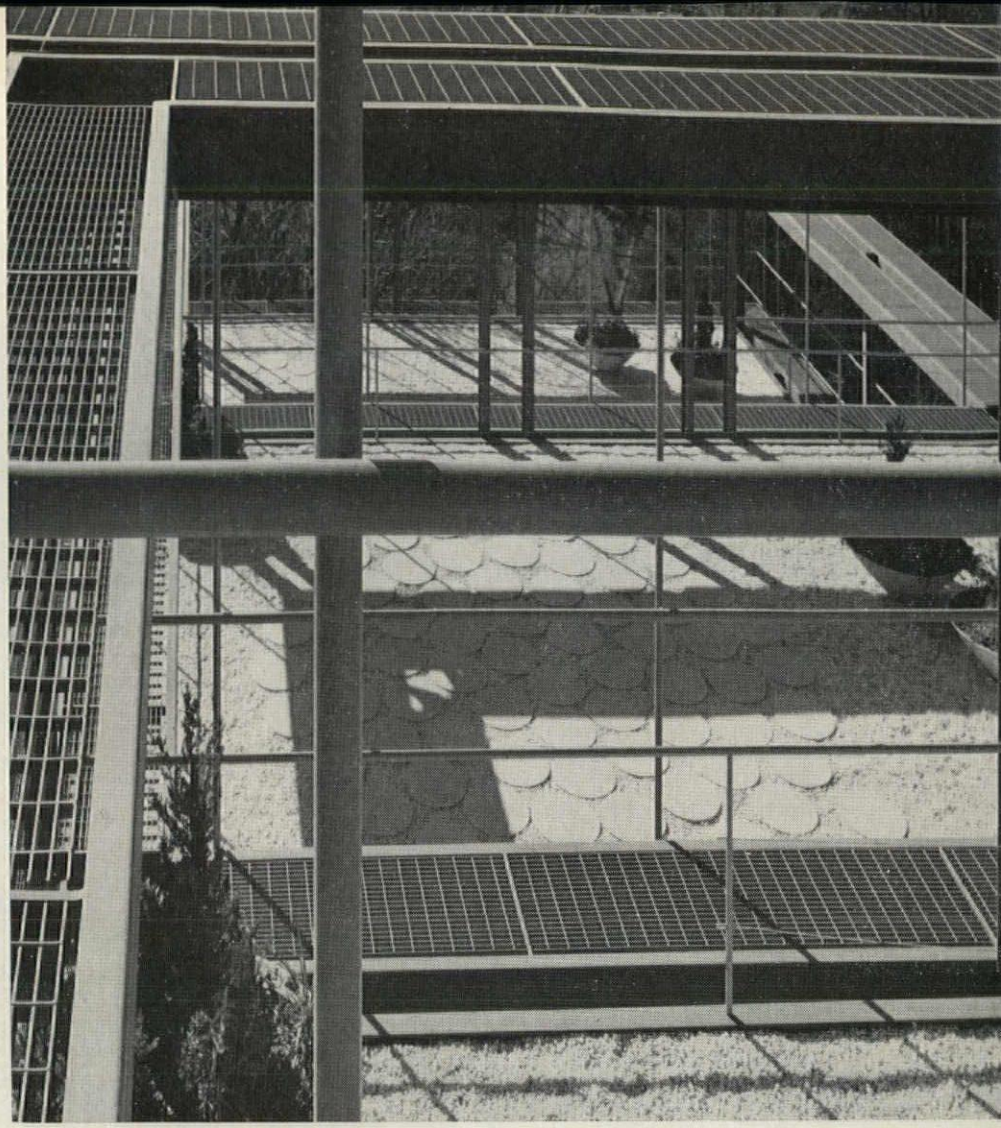
in the artificially-lighted cafeteria, darker in the naturally-lit auditorium). Furniture designed by the architect and fabricated in Germany was used throughout the building. Of particular — and unusual — note is the consistency of treatment throughout the building. The tile and fixtures in the janitor's washroom are the same as those in the lavatory used by the ambassador. The stairway, though not on direct public view, is a finely detailed architectural expression in itself, inviting one to climb a flight or two instead of using the elevators. Only when one reaches office areas perhaps not generally open to the public do some materials change: walls become plaster and floors rubber tile, for instance, but cabinet work is kept Douglas fir to relate to the rest of the building.

The plan, with the elevator and stair core as the "middle" of the building, is said to work exceptionally well in creating appropriate and separate work areas for the different





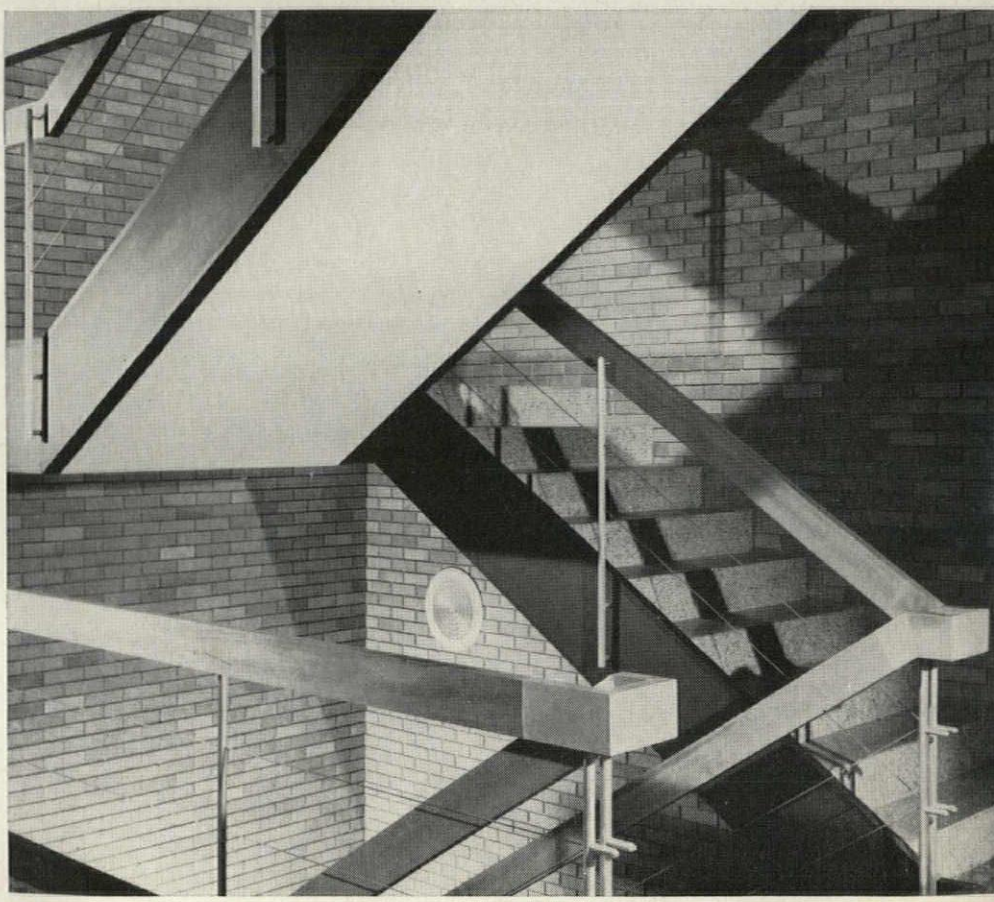




departments of the mission. The ambassador's office is at the front of the fifth floor of the building looking out on its own terrace and those beneath, and a conference room is on the sixth floor, with a similar view.

As dedication of the building approached, Eiermann is said to have remarked, "May this house not only be an Embassy, but have a mission as well." For the architectural part of the mission, he has spoken well, having created a building unmistakably of his own country that recalls Germany's contributions to the advance of modern architecture in the 20th Century. And, not so incidentally, Germany has given Washington an official building that puts most of the others to shame.—JTB, Jr.

Architect: Professor Egon Eiermann
Associate Architect: Eberhard Brandl
U. S. Consulting Architects & Engineers: Lublin, McGaughy & Associates
Construction Supervision in Washington: Johannes Galandi and Josef Joraschek
Consultants: Aram F. Normandin, Architect; Carl Hansen, Structural Engineer; James Eliopolo, Electrical and Mechanical Engineers
General Contractor: Wm. P. Lipscomb Company, Inc.

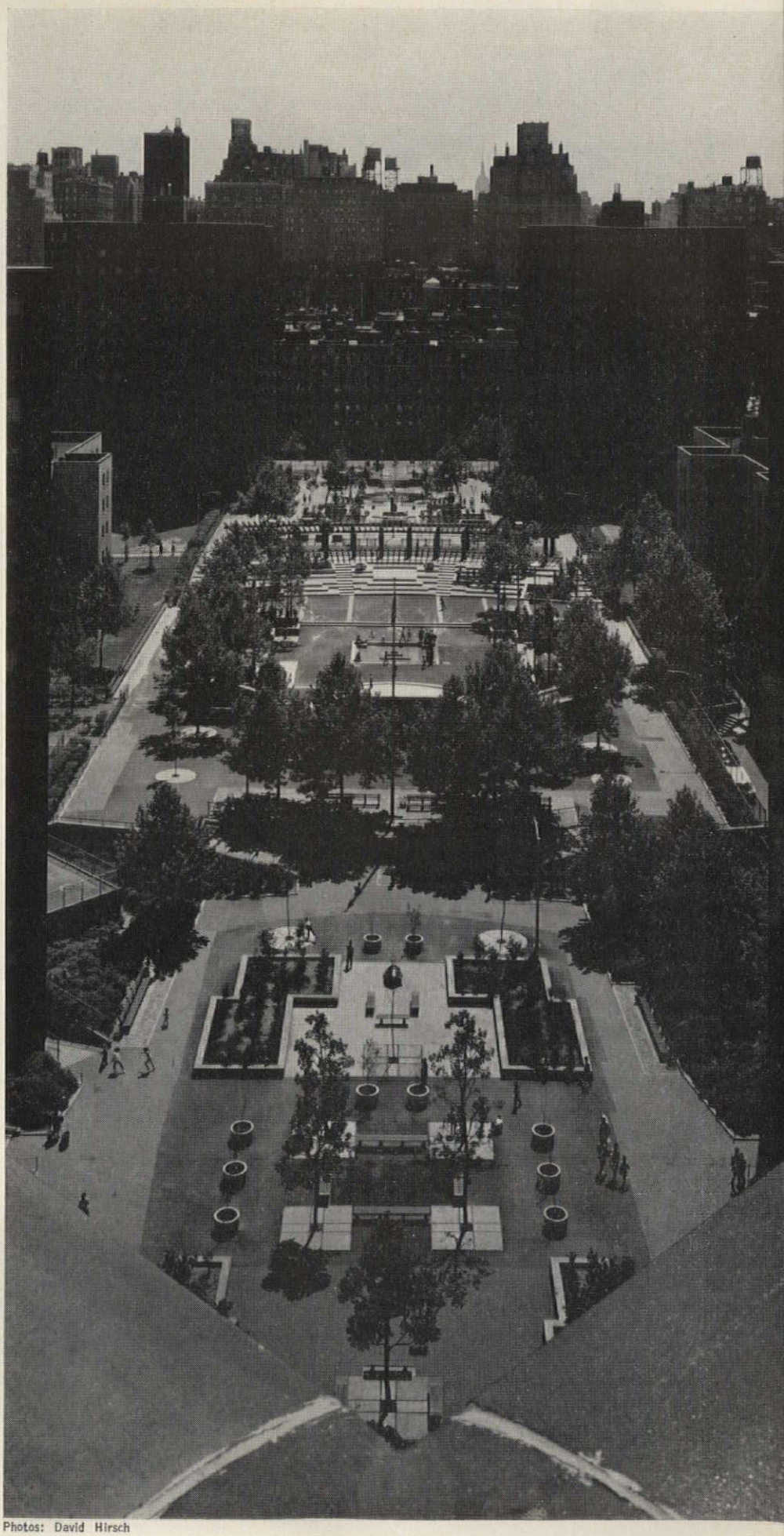


MAKING PUBLIC HOUSING HUMAN

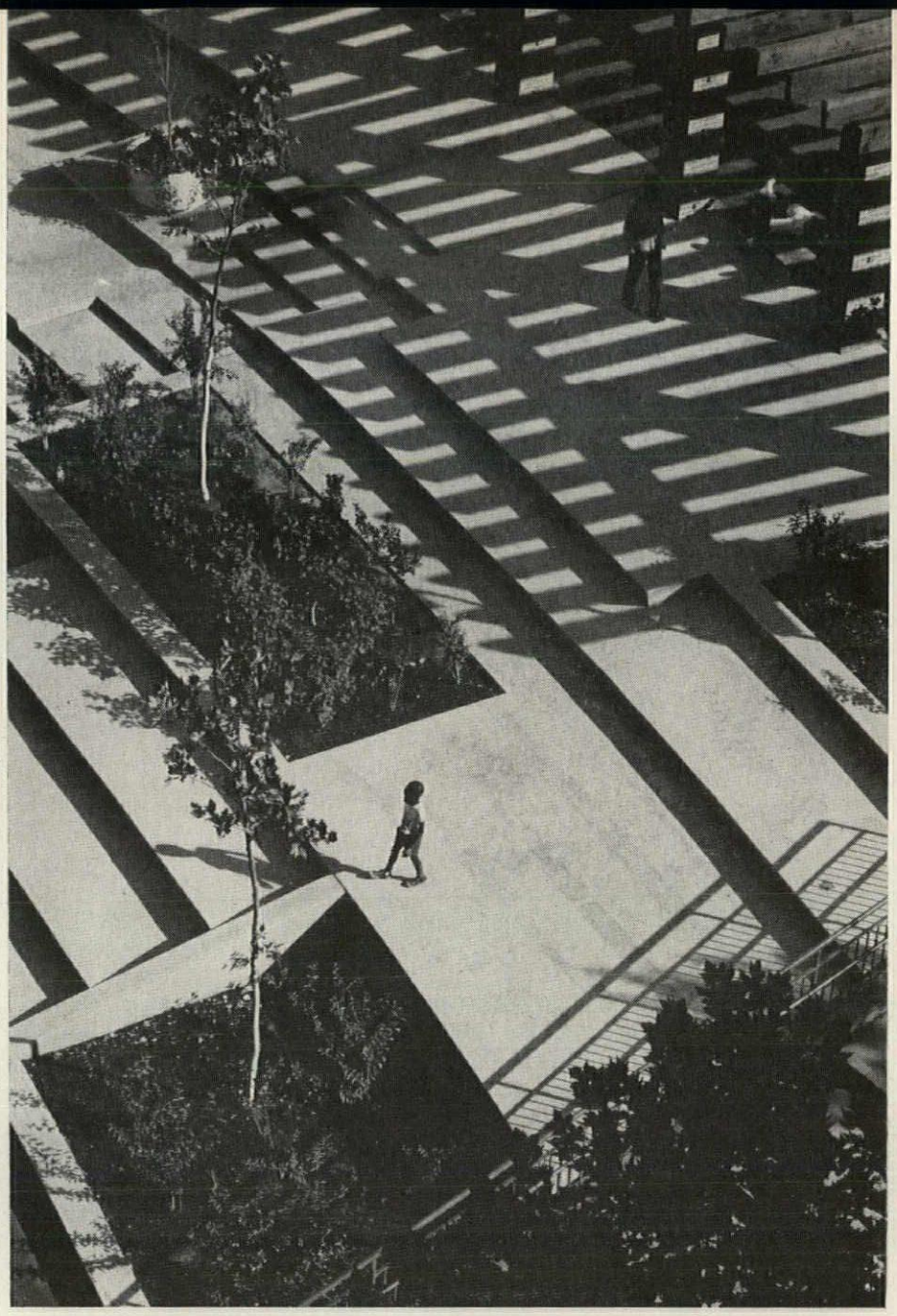
Low-cost public housing in New York, like its *doppelgängers* in other large cities, most often has been a collection of monolithic, institutional apartment structures about as inviting to live in as Wormwood Scrubs. The proliferation of such slab, point, cruciform, semi-high-rise, and high-rise containers has seldom performed the necessary function of trying to introduce beauty or variety into the lives of the inhabitants. Given the unyielding thinking usually popular among housing and redevelopment officials ("It costs too much;" "Maintenance would be difficult;" "The residents would not appreciate such fancy ideas") it causes little surprise that, generally, well-designed lower income housing is infrequent and that the "ancillary" factor of good use of open space is even more unfamiliar.

At the Carver Houses in upper Manhattan, something has been done to relieve the sere environment created by a housing development erected in 1958 (Kahn & Jacobs, Architects). The Vincent Astor Foundation has underwritten a notable *re*creation of the between-buildings open space *for* recreation. Following designs by Architects Pomerance & Breines and Landscape Architect M. Paul Freidberg, a desolate landscape of concrete, asphalt, and chained-off "grass" spaces has been replaced by a usable, multifaceted public court that the inhabitants have taken to their hearts.

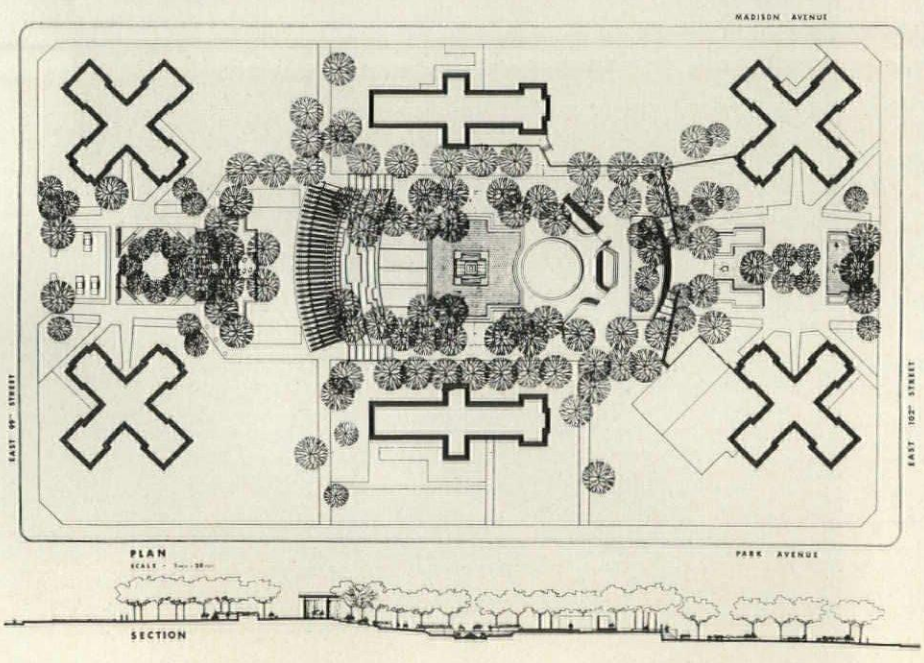
Attempts of this sort have taken place in New York housing developments before, notably the one by Albert Mayer at Harlem's James Wedon Johnson Houses in 1960. As a precursor showing the city how public spaces in public housing could be designed, the Mayer design was commendable in many respects.



Photos: David Hirsch



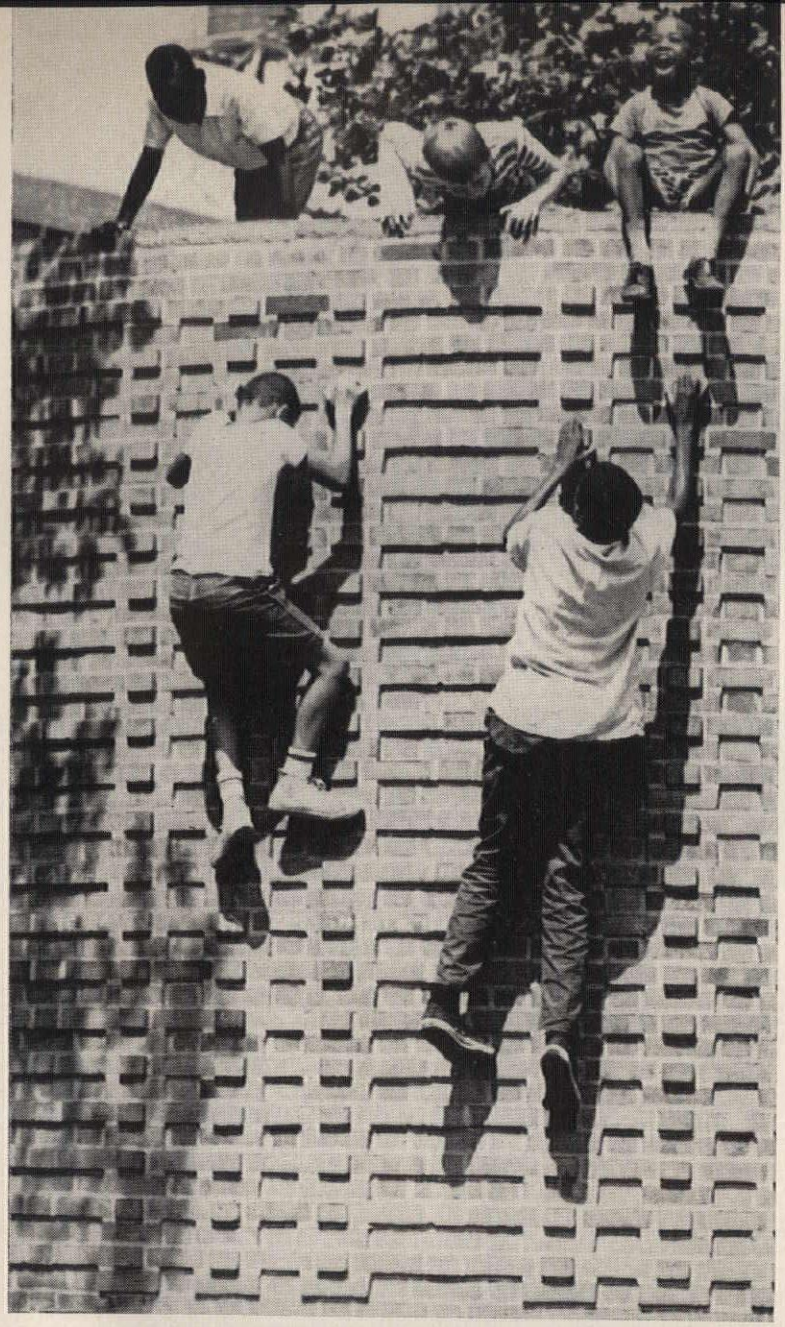


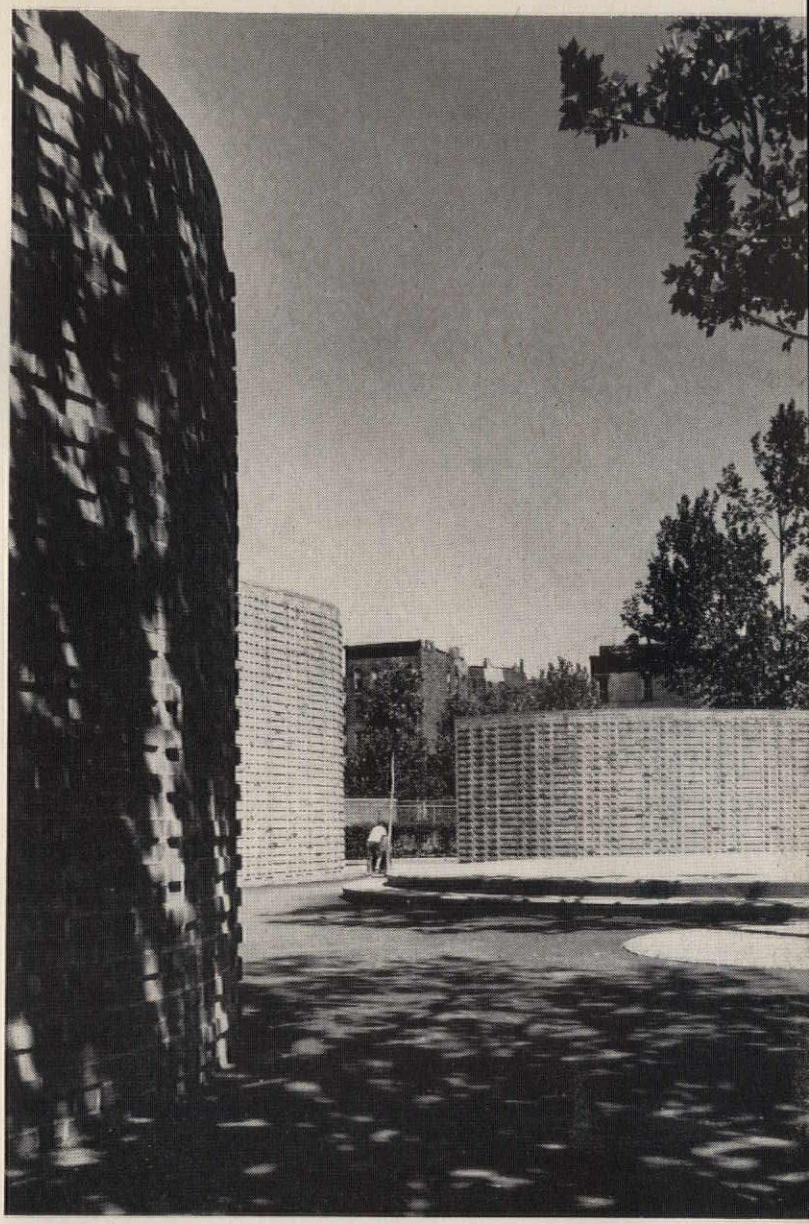


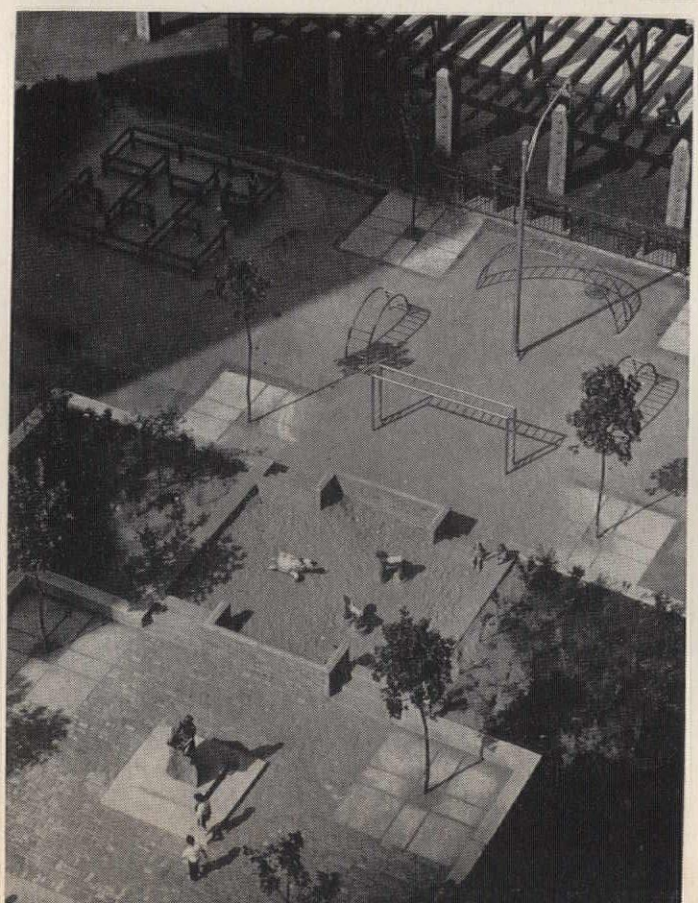
Now comes an even more imaginative—and, for those who worry about such things, more easily maintained—solution.

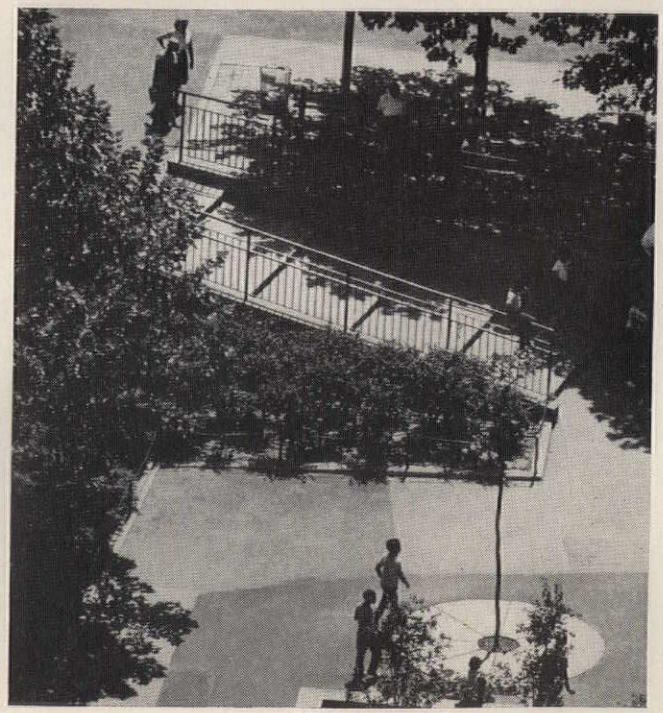
The Carver Houses public space extends almost three blocks, between East 99th and 102nd Streets, and includes playgrounds, sitting areas, checker tables, and, as the "center" of the composition, an amphitheater for outdoor performances (making it a prime spot for the traveling New York Shakespeare Festival troupe discussed in the SEPTEMBER 1964 P/A, pp. 93–94). Friedberg has said that here he has strived to avoid the "insubstantial" look of developments such as Mayer's (metal umbrella roofs, killable plants, vandal-prone materials) to achieve the character of a traditional square or park with durable but attractive materials. In the Carver Houses, for instance, the walls, walks, pavilion, playgrounds, and other amenities are largely constructed of such materials as brick, concrete, metal (for sculptures), wood, and water. The plantings — usually in raised planters — protect themselves by visually inconspicuous but nevertheless effective thorns.

The approach of the architects and landscape architect on this job reflects a concern for the frequently oppressive spaces between equally oppressive lower-income apartment dwellings that is admirable—no less laudable than the willingness of the Astor Foundation to pick up the tab. If the city (and we speak generically of cities throughout the country) can now be persuaded that monies used in such endeavors are well spent, a primary victory over "up-to-date slums" will have been won.









NEW YORK'S CIVIC CENTER TAKES FORM

Plans for major civic improvements in New York have a way of taking approximately the same time it took to build Notre Dame, with about the same amount of advancing, backing, and filling on the part of officials and interested lay persons. This pattern has not changed for the city's Civic Center, which, with a plan by Edward Durell Stone and Eggers & Higgins, at last seems to be in sight of land.

In 1949, when the present mayor, Robert F. Wagner, was chairman of the City Planning Commission, a study was made of the area around the historic City Hall (1802–12; Joseph F. Magnin & John McComb). After some minor site acquisitions and traffic changes, this plan was allowed to languish until November 1961, when the city announced its intention to build a City Hall Annex (since known as the Executive Office Building). The fact that this building, together with a forthcoming new Federal Office Building and U.S. Customs Court House just north on Foley Square, would completely change the area, brought civic officials to the realization that an up-to-date plan had to be made of the area if complete chaos was not to result. Consequently, Architects Max Abramovitz, Simon Breines, and Robert Cutler were appointed to prepare a plan to develop the City Hall area as a cohesive entity. Their plan, usually referred to as the ABC plan, proposed a raised mall over a concourse connecting City Hall, the new Executive Office Building, a new Municipal Building, and the existing Surrogates Court (or Hall of Records) and the old Municipal Building. This plan received the support of the New York Chapter AIA and other organizations, but was continually attacked as not comprehensive enough by the Architects Council of New York under the prodding of Architect Nathan R. Ginsburg. Ginsburg's protests were mainly directed at the siting of the Federal Building (which is out of the city's authority and will not be changed, according to Karel Yasko of General Services Administration) and to what he considered inadequate planning for traffic around the site and from the Brooklyn Bridge approaches next to City Hall Park. Later, in mid-1963, a group of architects, planners, and critics who also found deficiencies in the ABC plan banded together as "New Yorkers for a Civic Center of Excellence" to oppose it and find a means for the creation of a better scheme. Their opinions were shared by professionals of the calibre of Le Corbusier, Lewis Mumford, Edmund Bacon, and William W. Wurster. On February 4, 1964, a press conference was held under the auspices of the J. M. Kaplan Fund to propose to Mayor Wagner that he invite the views and suggestions of distinguished architects and planners on the Civic Center matter — bill to be paid by the Fund. The Mayor acquiesced, and a meeting was set up with Edward L. Barnes, Marcel Breuer, Peter Blake, Walter Gropius, Douglas Haskell, Philip Johnson, Burnham Kelly, I. M. Pei, G. Holmes Perkins, P/A Editor Jan C. Rowan, Paul Rudolph, Hideo Sasaki, and Jose Luis Sert. This "Committee of the 13," as it came to be called, eventually held several meetings to make comments and proposals on a new Civic Center plan now being developed by Stone and Eggers & Higgins, who had previously been named co-architects of the Executive Office Building. In May of 1964, the Committee of 13 (now reduced to 12 without Johnson) issued a public statement generally supporting the new plan as a "considerable advance on earlier designs, especially as to the handling of traffic approaches to the Brooklyn Bridge and as to awareness of a larger whole, not to mention the substitution of a sunken mall leading northward from the historic City Hall in place of the former proposal of a raised mall which from many viewpoints would have obscured the view of that handsome but low-lying monument." The handling of the bridge approaches was a "plus" in the plan (as were indications by the architects of possible future expansion to the north and south of the Civic Center and the squaring off of City Hall Park at its south end (see over-all view, **3**).



Photo: Ezra Stoller Associates

The committee stated in its May release to the city and the press that "The new proposal for the Brooklyn Bridge approach is vastly superior, aesthetically, to the old one. We recommend it. It is not only more handsome in itself, creating a formal plaza in front of the bridge, but it also takes away the previous tangle of twisted approaches from the close vicinity of the dignified old Municipal Building. And since Highway Commissioner John T. Carroll is reported as being satisfied that the new solution is functionally acceptable, we urge that engineering construction be delayed until plans can be devised." P/A joins the Committee of 12 in acclaiming this proposal, which would add immeasurably to the whole Civic Center area and at the same time provide a noble view of Roebling's Brooklyn Bridge, recently named a national landmark by Secretary of the Interior Stuart Udall.

The report was not entirely unstinting in its praise. The new plan brings together in one 52-story tower the functions that were put in two new buildings in the ABC scheme. The committee was of the opinion that this tall building "intrudes into and dominates the main space" and "should be handled less as a tower and more as a 'wall,' " to define the Civic Center space. It felt that New York is not lacking in tall buildings but decidedly *is* lacking in well-defined and bounded open urban spaces. All above- and even below-ground elements of the new Civic Center, the committee felt, "should be so placed as to enclose, mark, and render attractive the main central space." Edward D. Stone and David L. Eggers came out for more generalized open spaces in their introduction of the new plan, saying that "the awsome density of Manhattan Island makes such areas extremely difficult to come by. Obviously, they can only be achieved by stacking vertically functions that otherwise would be spread horizontally."

In the new proposal, as noted, city functions previously proposed for two separate buildings are in a 52-story tower, with the Mayor's suite

on the top floor (under this plan, the old City Hall would take on a ceremonial function). Stone says that this will create additional, needed light and air in the Civic Center. In the initial stages, the Hall of Records would remain, as would 2 Lafayette Street and existing buildings on Broadway and Duane Street. Hopefully, these would be removed in the future to increase the size and importance of the Civic Center Plaza. The creation of the plaza at pedestrian level (though still providing commerical enterprises around a sunken court and parking for 535 cars below) is expected to make the area much more accessible than the "Chinese Wall" of the ABC plan **(2)**. The in-progress construction of a number of high-rise apartment buildings nearby will give the Civic Center area, its shops, pool-skating rink in the sunken court **(1)**, and the plaza, a 24-hour life rather than the nine-to-five one it has now. The possibility of future expansion in several directions (except southeast, where Pace College and Beekman Hospital will have new building plans) is hoped for by the architects.

At present, the part of the plan most praised by the Committee of 12 —the revised approach to Brooklyn Bridge — is under consideration by city agencies involved with movement of vehicles, which is the reason for its ommission from the photograph that shows Stone's over-all proposal. If, as is hoped, this last barrier to the acceptance of the total plan is removed (possibly this month), New York will be able to proceed toward a really significant Civic Center.

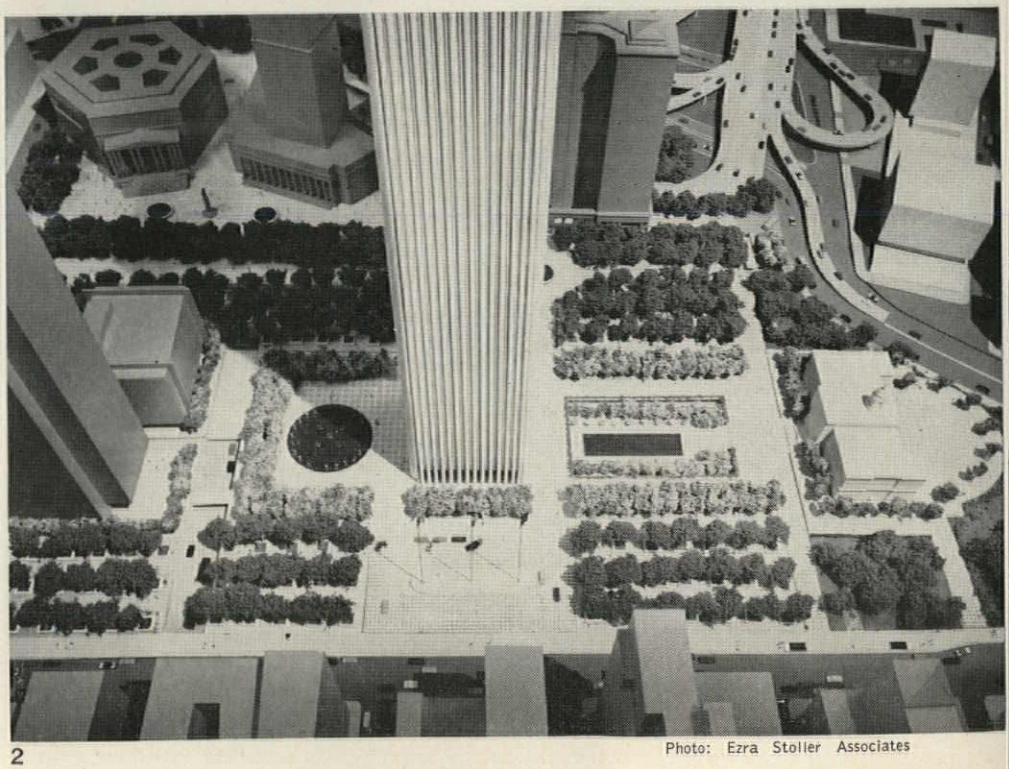
It should not escape the notice of architects in other cities that the "go fight City Hall" attitude of architects who thought a better job could be done was a major factor in getting this new Civic Center plan. This success story should encourage other groups who think their cities are getting short shrift in good design and planning.

Associated Architects: Edward Durell Stone and Eggers & Higgins
Mechanical Engineer: Syska & Hennessy, Inc.
Structural Engineer: Praeger-Kavanagh-Waterbury
Landscape Architect: Edward D. Stone, Jr.

***(1)** Sunken plaza looking toward City Hall; **(2)** aerial view of plaza with* (left to right) *City Hall, new Executive Office Building and Customs Court; **(3)** over-all model proposal extending plan into adjacent areas (bridge approach, now under construction, blacked out); **(4)** basic Civic Center plan.*



1



2

Photo: Ezra Stoller Associates

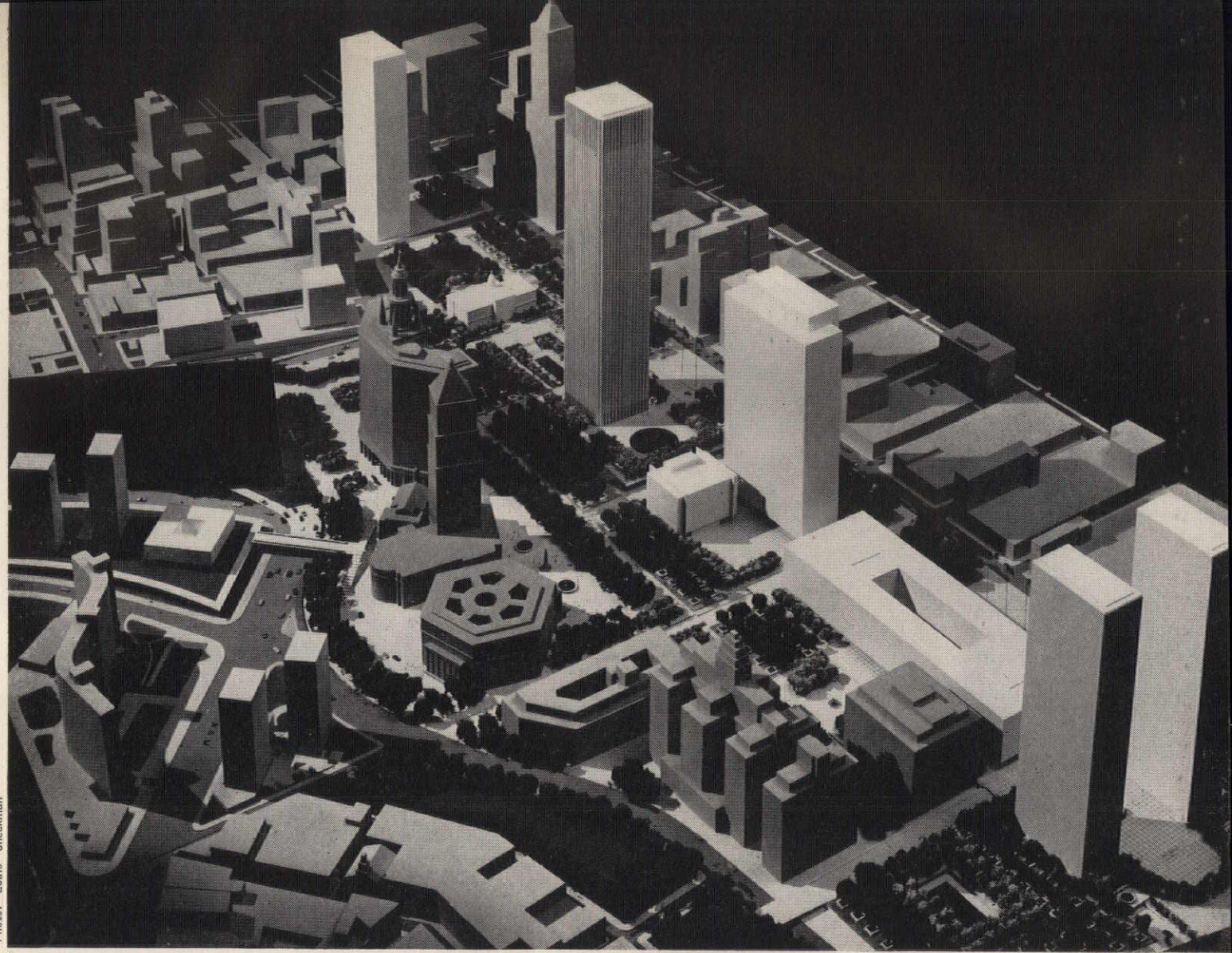
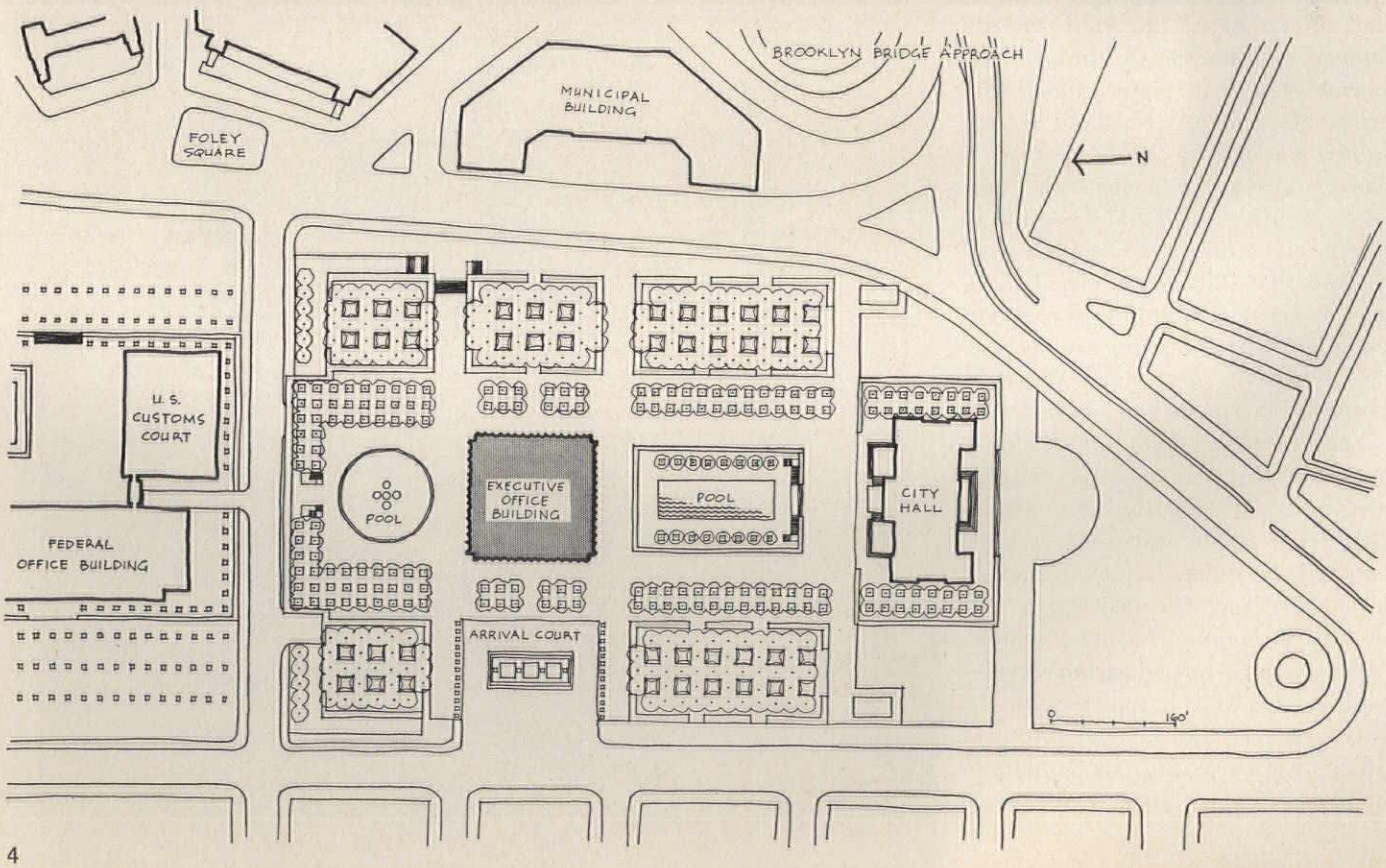


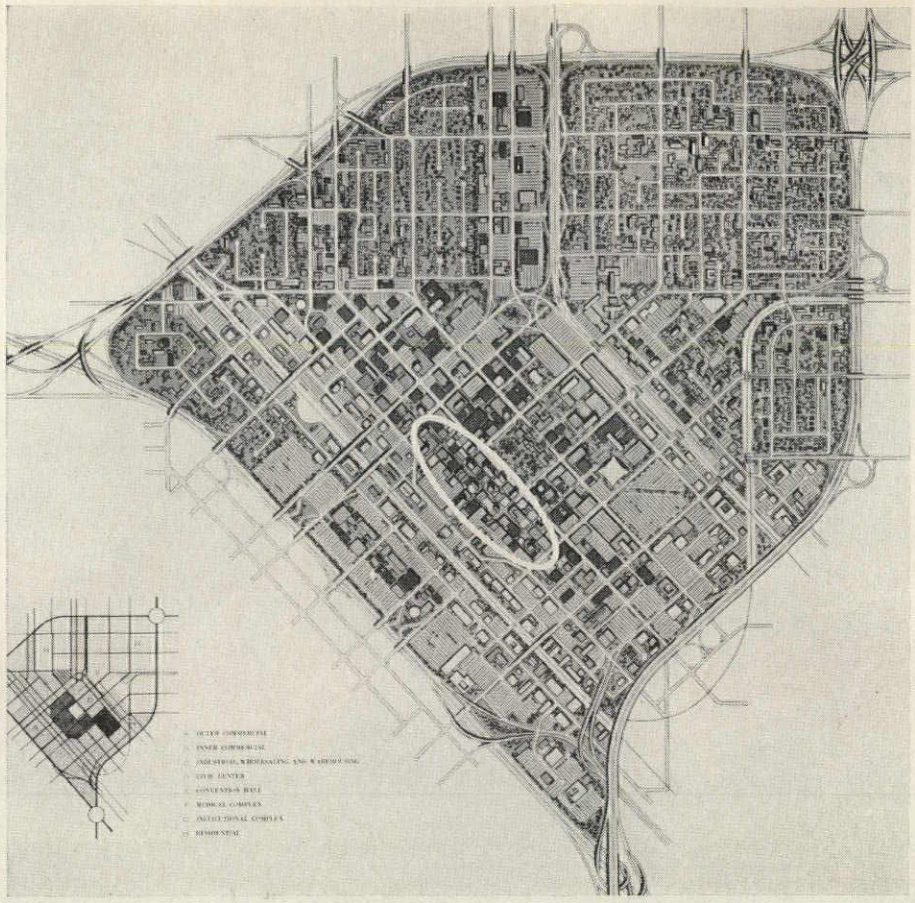
Photo: Louis Checkman

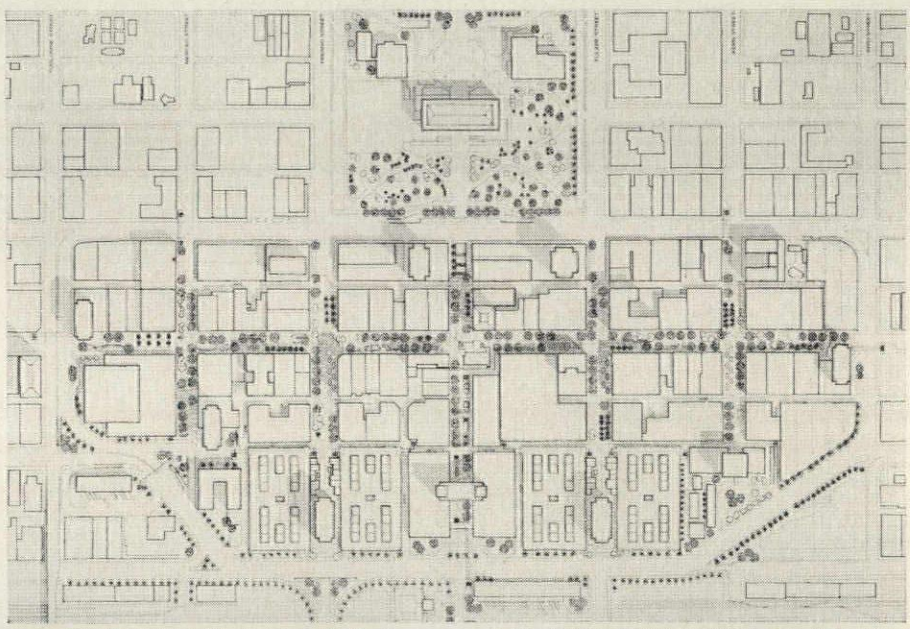
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4

HEART OF GRUEN'S FRESNO PLAN





Disappointed at the failure of the client to follow through his famous Fort Worth redevelopment plan to completion, Victor Gruen can content himself now with the beginning of the end of a more modest "Fort Worth" plan for a more modest city: Fresno, California.

This beginning is the completion of the heart of Fresno's Central Business District redevelopment, a landscaped pedestrian mall extending six blocks through the city's prime CBD **(2)**. "Fresno Mall," formerly dedicated in September, is expected to spark the continuing redevelopment of the entire central area of the city. (Gruen actually has three contracts in Fresno: one with the city for central area redevelopment; one with its Redevelopment Agency for a crucial 36-acre project; and one with the Downtown Association of Fresno, a group of businessmen and civic leaders, for downtown enhancement—such as the Mall—and specific land uses outside the redevelopment project.) Relation of the Mall and its planned tributaries to the over-all scheme is seen in plans (*right*). Interestingly enough, Fresno was farsighted enough in 1918 to have a plan made for the city by San Francisco architect Gilbert Cheney. It was the unearthing of Cheney's plan in 1956 that started the city fathers and business community on a responsible course leading to the hiring of Gruen's firm for a plan designed to fit Fresno's needs in 1980.

The completed Mall shows simultaneously the delights and dangers inherent in freeing the core of the CBD from traffic intrusion and attempting to create an environment that will attract the pedestrian and revivify a lagging business center. From ground—or pedestrian's eye—level, Fresno Mall is replete with objects, artifacts, and landscaping provided by Gruen and his landscape architect, Eckbo, Dean & Williams,



1


SECURITY BANK
ROOS ATK
MERCER
WESTFIELD
DR. B. NICK
DENTIST

3





4

Photos: Tidyman Studios

5



for the diversion and pleasure of the passers-by **(2, 3, 4, 5)**. This, of course, is the area where all items of street furniture, art works, civic graphics, and recreation places were the responsibility of the designers. Unfortunately, when the scene is viewed from above, the effect dissipates in an uncontrolled montage of individual store effrontery and advertising signs **(1)**. While one may wish that the Mall itself had been designed in a calmer manner by Gruen and his firm, one cannot but wish more fervently that the architect's clients had allowed Gruen to assume responsibility for *all* graphic treatment — private and public — to achieve a more cohesively stated public area.

Nevertheless, it is a start, and hopefully Gruen and his associates will be able to convince the clients in later stages of the Fresno project that all problems are not solved by a pretty mall, but that both the city and its citizens must cooperate on their own to produce good design.

Victor Gruen Associates:
Architecture, Engineering, Planning
Eckbo, Dean & Williams:
Landscape Architects, Site Planners
Jan de Swart: Sculptor of Clock Tower
Ray C. Fisher: Acting Executive Director,
Fresno Redevelopment Agency
H. K. Hunter: Fresno City Manager
Larry L. Willoughby:
Executive Director, Downtown Association



Looks like a permanent, flush-paneled wall



but isn't!

. . . isn't permanent, that is! It's movable Electro Line partitioning, made by the Architectural Systems Division of Westinghouse.

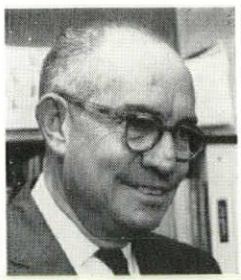
Flush-paneled? Yes, with durable Micarta® plastic laminate, whose textured wood grains have the happy faculty of concealing the snap-in mullion inserts between panels to create the rich, monolithic beauty you see above.

Fine detailing distinguishes the Electro Line as a premium partition system. Note the recessed base and ceiling members . . . the minimized door and glazing trim.

Versatility? Add the range of authentic Micarta wood grains and contemporary solid colors to mullion inserts that can either blend in or sharply define. The variations are unlimited.

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You can be sure if it's Westinghouse



Architectural-Engineering Education

BY WILLIAM J. McGUINNESS

This month's column has been opened to the Guest Editorship of Leonard Weger, of the architectural-engineering firm of Cronheim & Weger, Philadelphia. The problem to which Weger addresses himself concerns the increasing complexity of mechanical and electrical plant in modern architecture, its effect on architectural design, and the greater responsibility it places upon the architect. These subjects, he holds, must receive improved treatment in the curricula of our architectural schools. The article that follows first appeared in the November 1964 issue of Heating, Piping, and Air Conditioning, *a journal affiliated with the Reinhold Publishing Corporation. Because of its importance to the profession as a whole, we are reprinting it in its entirety.*

The study of architecture in our universities today, whether taught in a graduate school, at the undergraduate level, or a combination of both, is not a course for dilettantes.

The professional subjects are usually encompassed within a period of three or four years. To cram into this short period all of the courses—aesthetic, historic, and specific—required by the practicing architect, is no mean feat. The curriculum is of necessity crowded, varied, and intensive. Design courses, by their very nature, demand the lion's share of the student's time.

Of the engineering subjects, structure has had a fairly prominent place in most schools. With a constant stream of exciting developments in structural techniques, and with the recognized importance of the structure in determining the form of the building, architectural teachers and their students are quite willing to devote a fair portion of their day to structural design.

The other engineering subjects have not fared so well. Mechanical and electrical components of today's buildings have become increasingly important to every successful building. They have become more complex and diversified. They account for an increasing part of every construction dollar, mainly because the client has become more aware of and demanding of the best possible environment.

Yet, all too often, the architectural student, as he perspires in his academic gown on graduation day and peers into the audience for his mother and fiancée, is only dimly aware of why he perspires and peers, and what should have been done to make the day as comfortable as it is auspicious.

The harried dean, having already relegated the humanities to the first year or two of undergraduate school, and understandably reluctant to constrict the vital design courses, is faced with the necessity of adding engineering courses only recently considered unimportant.

Even where the need is clearly seen (and in all fairness, this is most often the case, since the subject has been belabored in recent years), it is understandable that a technology scarcely two decades old has not become a part of the educational process.

The architectural teacher, often a practicing professional who devotes only part of his time to teaching, is himself sometimes lacking in awareness of the engineering gap, not having been exposed to those subjects during his academic work. He may take the laissez-faire attitude that the young practicioner can "pick up" all he needs to know about the mechanical plant as he gains experience in an architectural office. After all, he will usually be working with an engineering consultant anyway.

Thus the young architect begins his career as only half an architect, with practically no training, no intuition, no discrimination as to that part of his building that may involve 30 or 40 per cent of its total cost, that will certainly influence its form, and that may well be the part that creates for him a happy client, or a sad, embittered former client.

Unless he is the exception who will, in practice, see the need, and who can educate himself in this broad field, he will produce buildings in which the mechanical plant is apt to be overcomplicated, overcostly, tortured, difficult to maintain, and generally a trial and tribulation to his client. This will simply be the result of his abstaining from entering into the broad planning of his plant as he develops his building.

True, his engineering consultant can usually keep him out of major trouble. But often the engineer has an analgous blind spot. He is too much the specialized engineeer, with eyes closed to order, to aesthetics, to the *over-all* needs of the building. Neither he—no matter how competent—nor the architect can work independently of each other if the true potential of our technology is to be realized.

Not that the architect would ever be expected to design, in detail, a complex of mechanical and electrical systems. Heaven forbid! But an architect with a good working knowledge of methods, systems, and costs; with a sense of discrimination as to when a particular *kind* of system or equipment is appropriate; with an awareness of the spaces, ductways, shafts and routing needed for the mechanical plant; with a willingness to work in close rapport with his engineering designer from the inception of his design, can produce a better building every time.

At the University of Pennsylvania's Graduate School of Architecture, the need for co-ordinated engineering orientation of the architectural student has long been recognized, and a start in this direction was made a number of years ago. Today the program has evolved as follows.

During the student's first and second years of graduate work, he is given a course in mechanical plant for one semester involving three semester credits, and a course in electrical work during

Continued on page 224

For more information, circle No. 392



A NEW WORLD TO WORK IN

So many of today's offices are a wasteland. They sap vitality, block talent, frustrate accomplishment. They are the daily scene of unfulfilled intentions and failed efforts. Places of fantasy and conjecture rather than achievement.
They foster physical and mental decline and depress capacity to perform.
It is the equivalent of doing business on clay tablets in the age of the computer and instant communication.
Herman Miller has done something about it.
For three years Herman Miller's Research Division at Ann Arbor has been studying the human performer in offices. What makes him work best. Why.
The Action Office, designed by George Nelson, is the result: A working climate created to support and stimulate its occupant to his best performance.
Its core is the capability to create working space that helps the worker work because it is based on a grasp of environmental forces and their effect on humans.

A NEW WORLD TO WORK IN

Action Office assists the office worker to fresh physical and mental vitality. In turn, improved environmental efficiency should help a company or organization function with greater economy and productivity.
In attracting and keeping superior personnel, Action Office becomes a powerful basic benefit in an era of competing fringe benefit offers.
Action Office provides effective means to achievement in the office environment. It maintains Herman Miller standards for practical elegance and long-term usefulness.

HERMAN MILLER, INC. ZEELAND, MICHIGAN

Photo: Lester Bookbinder



Tips on Excavation

BY HAROLD J. ROSEN

Typical specifications for dewatering and underpinning are discussed by a Fellow of the Construction Specifications Institute.

When a site has a particularly high water table, consideration should be given to the use of well points for dewatering within the area of the excavations. Groundwater, unless it can be controlled during these operations, can cause sand excavation to be more costly than rock excavation.

Well points consist of a series of screened perforated tubes, which, when installed below grade in a saturated soil, dewater the site by filtering and collecting the groundwater and siphoning it to the surface by connected pumps. The latest type of well point is also designed to permit easy installation by means of a self-jetting feature. This feature reduces the cost of installation and its action washes away the fines from the well point, leaving the coarse soil particles around the screen to act as a porous filter.

A well point system consists of a series of well points each approximately 42 in. long and 2½ in. in diameter, connected in turn to a 1½ in. riser pipe. The riser pipes in turn are connected to a horizontal leader line and this line is connected to the well point pump.

There are firms that specialize in the dewatering of sites by means of well points. They examine the borings, the specifications, drawings, and all of the pertinent topographical features that must be taken into account in determining the extent of the well point system to be installed and where to discharge the water that is brought to the surface.

A typical specification for a dewatering system using well points follows:

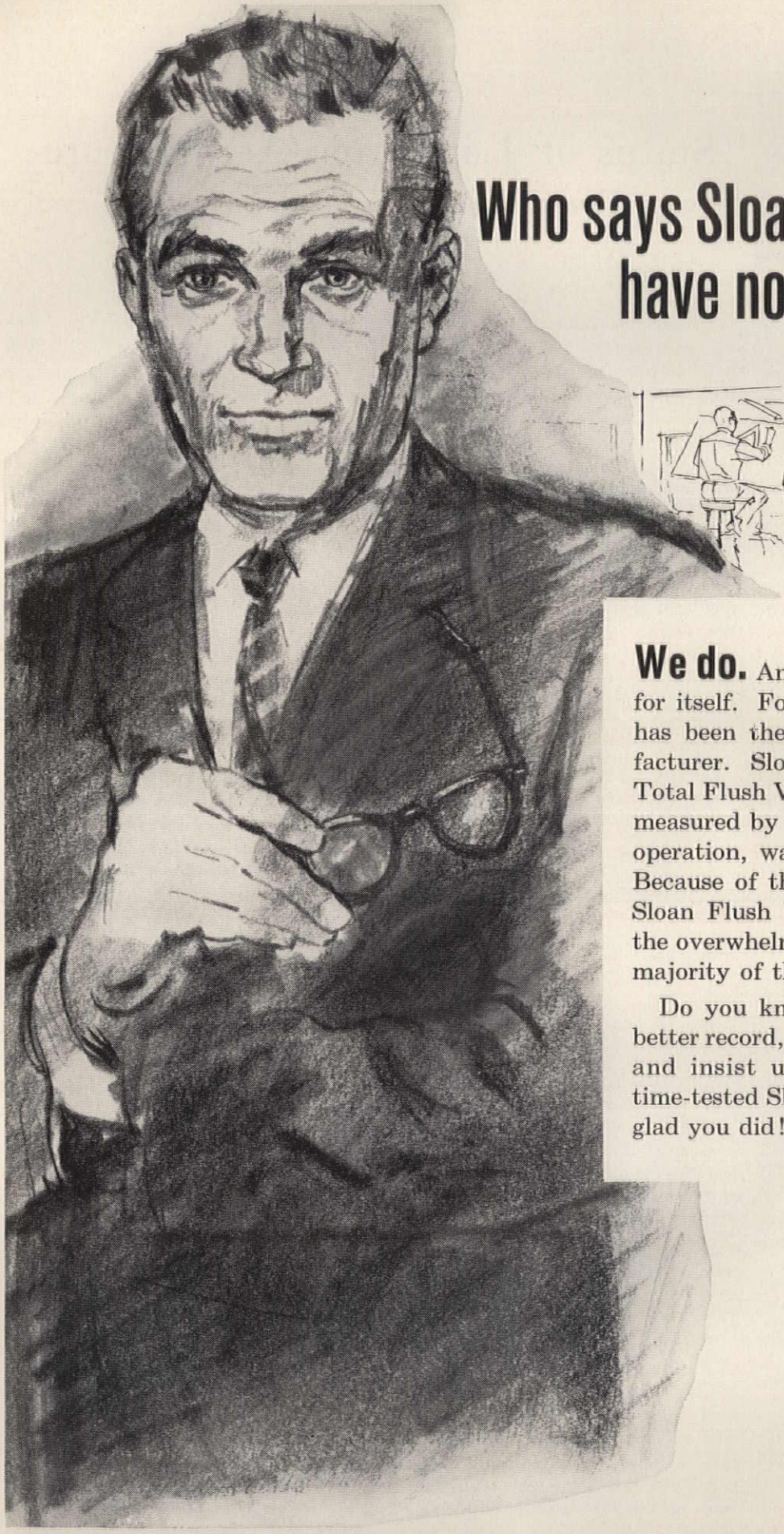
Dewatering. (a) The contractor shall provide a system of well points, pumps, and drain lines for the removal of ground water. See drawings for levels at which ground water shall be kept and for length of time required to maintain these conditions. (b) The system of dewatering shall also be adequate to remove storm water from the excavations and prevent accumulation of surface water. (c) The dewatering system shall be installed and operated in such a manner as to avoid the movement of fines or loss of ground from below the bearing levels and shall not influence the stability of surrounding areas. (d) Well points shall be driven by means of water jetting or by the sand casing method. Either method employed shall include the facilities needed to eliminate loss of ground. (e) All necessary dewatering, pumping, and conducting of groundwater away from the site shall be performed under this section of the specifications. All work involved in lowering of well points to meet unusual ground and water conditions, low spots, lowering of footings, and other such contingencies shall be included as part of the contract price.

Underpinning of existing foundation walls is required whenever a new structure is built adjacent to and below the elevation of the existing structure. Underpining consists of excavating a cavity below the existing footing, the width and length of the new structure. A continuous concrete footing is then placed under the existing footing, thereby bringing it down to the level of the new adjacent construction.

However, in order to prevent undermining and collapse of the existing structure, only small sections at a time are excavated and underpinned. In order to make one continuous wall and not individual pier footings, horizontal reinforcing dowels are inserted in each section as it is excavated and concreted so that the final footing acts as one continuous wall footing.

A typical specification for a system of underpining follows:

Underpinning. (a) Underpinning shall generally consist of excavating and concreting in sequence several pits of small dimension under each footing or wall to be underpinned. The pits being excavated at any one time shall be far enough apart so that there is no danger of collapse of the existing structure. Adjacent pits shall not be excavated simultaneously. (b) In general, the required depth of underpinning and the depth of existing footings are shown on the drawings. The existing footing depths have been obtained from the latest information available, but this may be in error. It is the contractor's responsibility to check these dimensions and to insure that in no case shall a line drawn from the near edge of the underside of any footing or its underpinning at a two horizontal to a one vertical slope, pass above the same point on any other footing or above the lowest point of any excavation. (c) Underpinning shall be performed by a contractor specializing in this type of work and having not less than five years of this type of experience. (d) The contractor shall prepare working drawings showing details of all underpinning operations, including sequence of construction, size of pits, and methods of shoring. (e) Review of these drawings by the architect will not relieve the contractor of full and complete responsibility for the safety of the existing building. Any failure, damage, subsidence, upheaval, or cave-in shall be the sole responsibility of the contractor and he shall bear the entire cost of correcting any of these defects.



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Status of Landscape Architecture as a Profession

BY BERNARD TOMSON AND NORMAN COPLAN

P/A's legal team discusses a recent decision touching on the legal status of landscape architecture as a profession, which, while helping protect the public against the unqualified through its licensing requirements, raises some uncertainty as to its effects on architects practicing landscape architecture.

In New York, a license must be obtained to practice landscape architecture. The applicable statute, which became effective in 1961, prohibits the unlicensed practice of landscape architecture, establishes a Board of Examiners to carry out the licensing provisions of the statute, and prescribes penal sanctions for its violation. The constitutionality of this statute was challenged on the ground that landscape architecture was not of public concern and consequently did not fall within the "police power" of the State. The highest court of New York, however, has recently upheld the constitutionality of this statute, ruling that the practice of landscape architecture involved the public health and welfare and was therefore subject to regulation by the State (*Paterson* v. *University of State of New York*, 14 N.Y. 2d 432).

The New York statute defines the practice of landscape architecture as follows:

"A person practices landscape architecture within the meaning and intent of this article who performs professional services such as consultation, investigation, reconnaissance, research, planning, design, or responsible supervision in connection with the development of land areas where, and to the extent that the dominant purpose of such services is the preservation, enhancement or determination of proper land uses, natural land features, ground cover and planting, naturalistic and aesthetic values, the settings and approaches to structures or other improvements, natural drainage and the consideration and determination of inherent problems of the land relating to erosion, wear and tear, blight or other hazards."

The statute, however, excludes from its coverage the practice of engineering or architecture and further excludes any business conducted by an "agriculturist, horticulturist, tree expert, arborist, forester, nurseryman, landscape contractor, garden or lawn caretaker or grader or cultivator of land, as these terms are generally used," except that no such person is permitted to use the designation "landscape architect" unless licensed as such.

Five persons who had been denied licenses on the ground they were not qualified, challenged the validity of the law, and in so doing questioned the status of landscape architecture as a profession. The Court, however, took the opposite point of view, stating:

"The practice of landscape architecture is recognized as the practice of a profession in this State. . . . and elsewhere. . . . as a profession embracing a field of highly technical and specialized knowledge and activities 'between the professions of architecture and engineering' (citing authorities in Louisiana, California, Oregon, Georgia and New York). Such a determination 'is in line with the necessity for recognizing in the law, as in our universities, new professions which have been called into being to take care of modern requirements of our expanding civilization.' . . .

"We are told professional courses leading to a degree in landscape architecture are now being taught in 17 of the leading universities. Also for many years the cities and states have given civil service examinations for the appointment of landscape architects.

"Implicit in the term 'professional' is knowledge of advanced type in a given field of science or learning gained by a prolonged course of specialized instruction and study. The Legislature deems the practice of landscape architecture a matter of public concern, and enacted the challenged legislation 'in order to safeguard life, health and property.'"

The plaintiffs challenging the validity of the statute challenged the conclusion of the Legislature that the practice of landscape architecture in any substantial way affected the "life, health and property of the public." The Court, however, concluded that there was a substantial basis for this expression of public policy, stating:

"The testimony at the trial established that the regulation and practice of landscape architecture was clearly related to the public health and welfare and, as such, constituted a valid exercise of the police power, thus affording a substantial basis for the declared public policy."

The plaintiffs further challenged the statute on the ground that it was too vague and indefinite to be enforced. The Court was of the opinion that the language of the statute defining the activities of one engaged in landscape architecture was couched in language which, standing alone and without additional elaboration, might be regarded as too general. However, the statute also explicitly exempted from its operation a long list of designated occupations and activities, and it was the determination of the Court that, when these exceptions are read in conjunction with the licensing requirements of the statute, "a sufficiently clear standard of conduct is set forth to give fair notice to one concerned with or engaged in the activities regulated as to what acts are criminal and those that are innocent."

The Court also rejected the plaintiffs' contention that the discretion granted to the Board of Examiners to satisfy itself as to the sufficiency of the grade and character of an applicant's showing was an improper delegation of legislative power. The Court pointed out that similar discretion was granted to the administrative body licensing architects, and that the validity of such practice had been upheld.

Since the licensing statute governing the practice of landscape architecture exempts from its application the practice of architecture, it would seem clear that any landscape architecture practiced by a licensed architect as part of an over-all architectural project would be proper. However, the statute makes no specific reference to the propriety of a licensed architect (not licensed as a landscape architect) practicing landscape architecture independent of any building project. This absence of specific exclusion may create some uncertainty.

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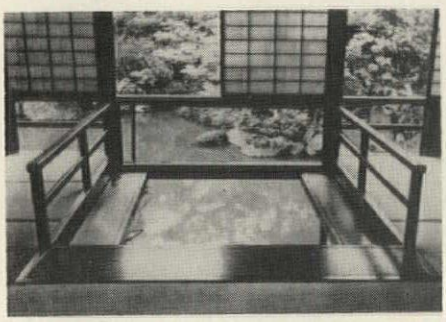




Photo: Bill Hedrich, Hedrich-Blessing

Two photos from the Clay Lancaster book, showing what Rose calls "a word-and-picture merry-go-round called 'influences'"

Three Faces East

BY JAMES C. ROSE

AN ARCHITECTURAL JOURNEY IN JAPAN *by J.M. Richards. Published by The Architectural Press, 9 Queen Anne's Gate, Westminster, S.W. 1, England (1963. 192 pp., illus. $6)*

THE JAPANESE INFLUENCE IN AMERICA *by Clay Lancaster. Published by Twayne Publishers, Inc., 31 Union Square West, New York 3, N.Y. (1963. 292 pp., illus. $17.50)*

TRADITION OF JAPANESE GARDEN *(2nd Edition) by Sutemi Horiguchi. Published by the Society for International Cultural Relations, Toyko, Japan. Distributed by the East-West Center Press, Honolulu 14, Hawaii (1963. 186 pp., illus. $15).*

Reviewer is a landscape architect who is on familiar terms with the culture and traditions of the East.

On my first visit to Japan, in 1960, I mentioned to Antonin Raymond that I intended to write a piece for P/A giving my impressions of Japan and the World Design Conference held in Toyko that year, and Raymond said, "Don't be an idiot."

Coming from a professional Asiatic, this glib capsule of advice should not be glossed over too hastily by those who have the urge to inform the West about the East; the idiocy quotient is enormously high, and the Western-eye view of Japan is such that there is a story currently circulating in Tokyo to the effect that one Western writer who has lived in Japan for three years is so smart that he already realizes he does not understand the Japanese. If he can just maintain this realization for 20 years, the story continues, he will be making progress.

I don't mean to imply that the Japanese cannot be understood—only that they can never be understood through the Western frame of reference. This, in itself, is not understandable to a good Western indoctrinee; he won't even admit that he is indoctrinated; he sees the *truth*, and that's all there is to that! So he will never understand the Japanese. The Japanese, on the other hand, will not argue with him. They will simply call him "very reasonable," which the Westerner is bound to take as a compliment, and which the Japanese will see as hilarious.

J.M. Richards, of the British *Architectural Review*, has chosen to ignore Antonin Raymond's advice and has come up with a delightful piece of idiocy. He gets by because he doesn't pretend to anything as obtuse as understanding the Japanese. He has simply written a diary covering 18 days in Japan—a whirlwind visit in which he seems to have seen everything currently being built, much of it in preparation for the Olympics. His powers of organization, both in making travel arrangements and in arranging his subject matter, can only be described as astounding. It is almost too much—one of those journeys where you

Continued on page 200

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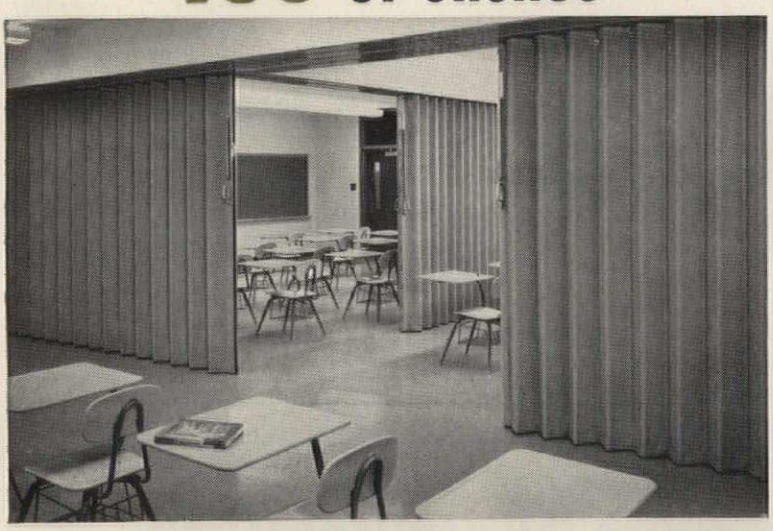
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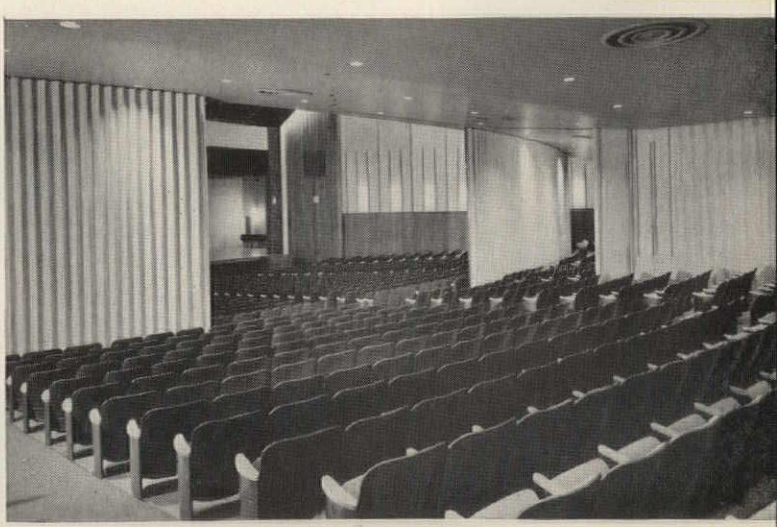
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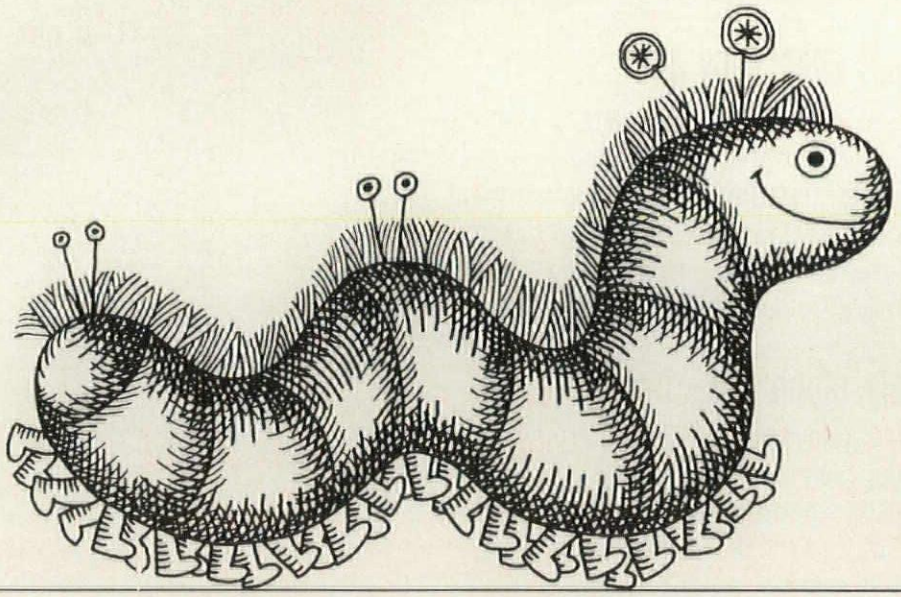
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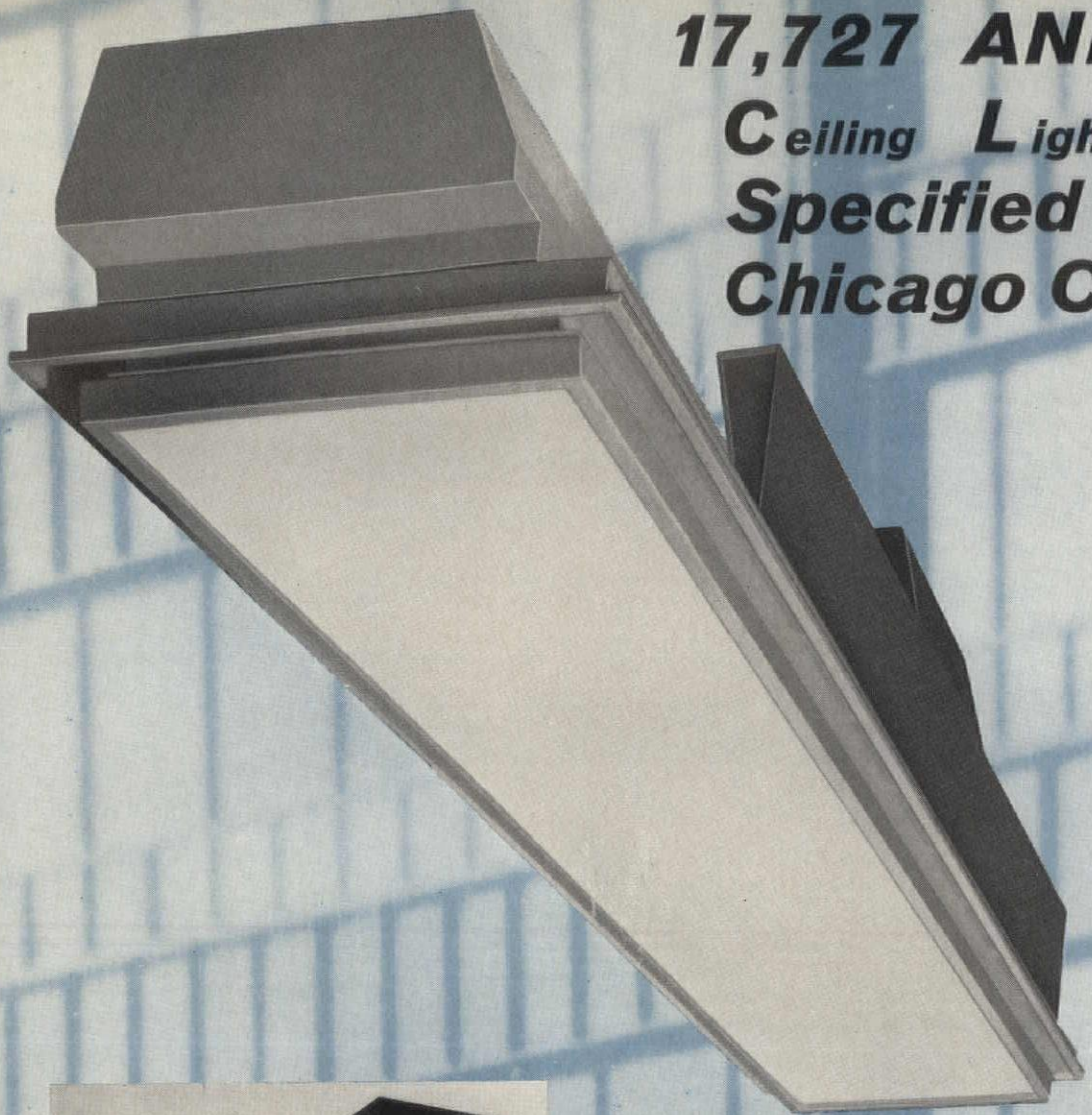
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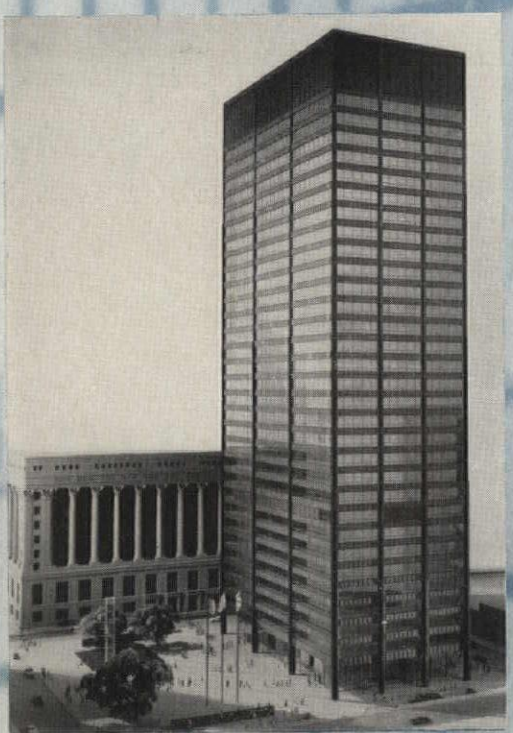
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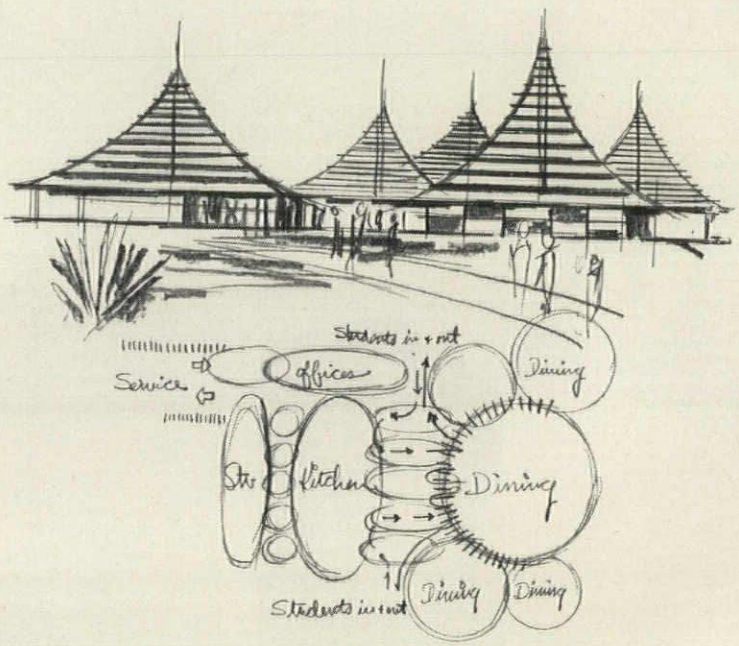
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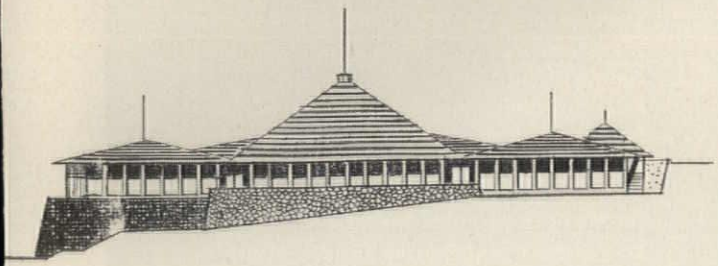
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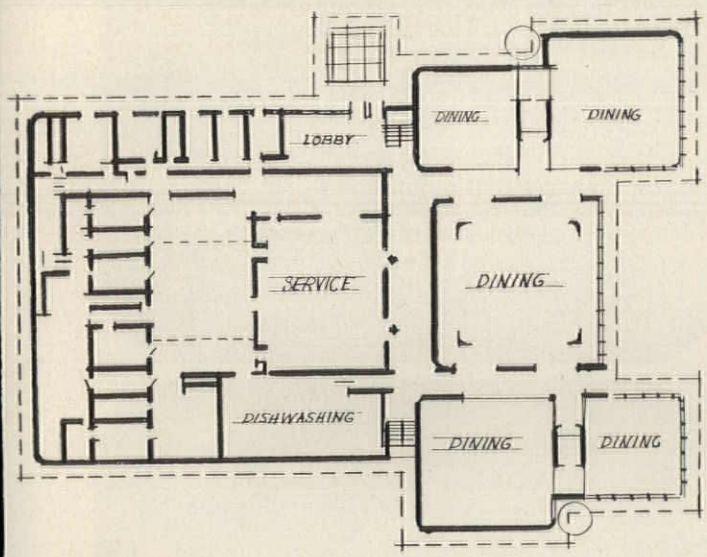
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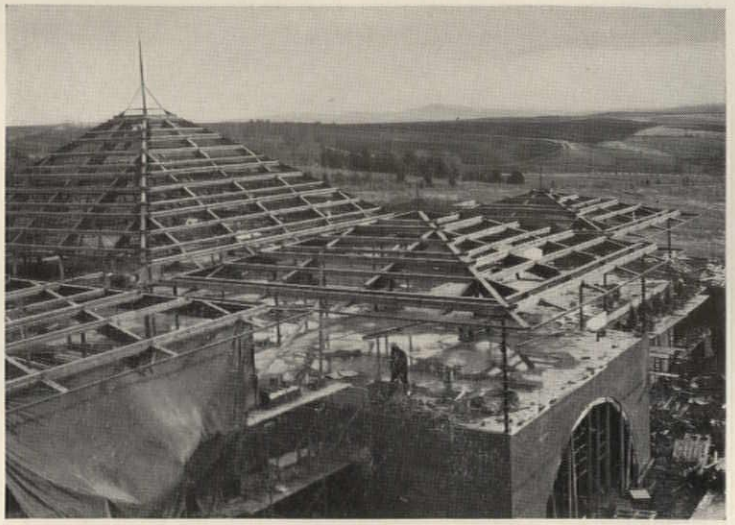
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Continued from page 194

feel that he should now take a good six-week vacation to recuperate, but you are also certain that he will not; instead, you get the impression that he was probably running *The Architectural Review* with his left hand while visiting Japan. He must have appeared to the Japanese like a creature from Euclidean space; but from a Western point of view, he emerges as one of the best travelers, organizers, and architectural journalists in the field today.

It is unbelievable that the scope of this volume could be covered in 18 days by one man if he did not have the resources of *The Architectural Review* and could draw heavily on articles previously published in that magazine for his illustrations and documentation. Even so, Richards' is an impressive achievement. I was so impressed that I decided to visit him in London, on my own way to Japan, to see for myself what manner of man could survive such a whirlwind tour and toss off an intelligent and astute volume to boot. I found him not only all I had fancied from reading his book, but quite willing to admit it without any pretense of false modesty, maintaining a composure of fair-mindedness in the best British tradition. In his current volume, he carries this tradition of fair play far enough to call Antonin Raymond "the father of modern domestic Japanese architecture"—a title begrudged in America.

This made me curious as to whether Raymond would have changed his opinion about the idiocy of week-end Asiatics who wrote books about their visits to Japan, in the three years since his pronouncement to me, and when I arrived in Tokyo last December, I asked him what he thought of Richards' book. He said it was "all right, but . . ." When I reminded him that Richards called him the father of Japanese architecture, he replied ". . . but that's not enough."

Well, apparently Clay Lancaster would say it was too much. For Lancaster has written a very large volume, *Japanese Influence in America*, in which the "father" is mentioned only perfunctorily as being "influenced," and not at all as an influence himself. Worse than that, Lancaster hasn't listened at all to Raymond's advice to authors of Japanalia. Instead, he has apparently spent the major part of his time since 1953, when he received a Guggenheim Fellowship, in ferreting out Japanese influences in America and writing articles about them for esoteric journals interested in tracking down such "influences." He has now brought this material together—in marvelous, if staggering, detail—in one ambitious volume. At times, as in the chapter on Japanese influence on gardens and landscaping in America, the details of historical minutia echo through the pages, catalogue-style, like the announcement of trains in a railroad station, but the effect is that of a genealogist who is discussing the family tree—at least the Japanese branch.

As with so many investigations of family trees, speculation is a wonderful aid in building an acceptable picture, and the genealogist can easily find himself out on the limb of conjecture (second cousin to gossip, twice removed), trying to tie everything neatly together. In this way, while apparently sticking to fact, Lancaster has a habit of treating his connectives rather loosely, so that in a remarkably short space, he can start with a few harmless generalizations, say, about the turmoil of World War I, and suddenly startle the reader with a conclusion like, "Thus was developed the International Style." After deciding in the next few sentences that the result of Corbusier's "machine for living" proclamation was a "house made like a factory," he can in the same paragraph conclude that ". . . the International Style

Construction Details

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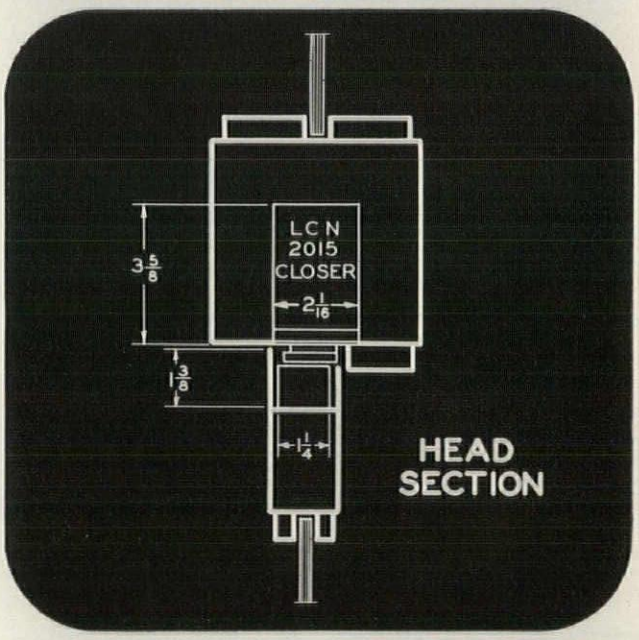
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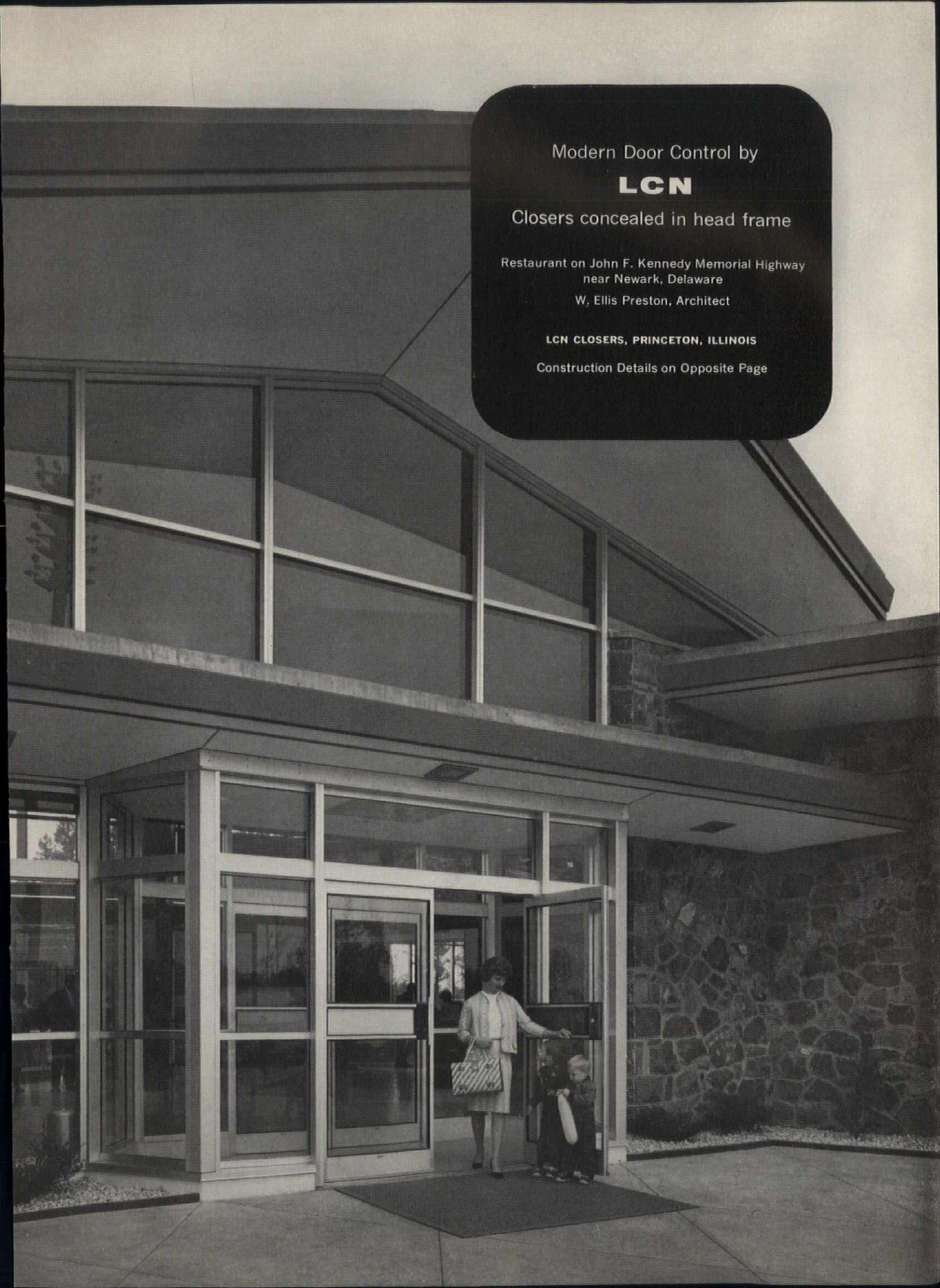
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Construction Details on Opposite Page



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. . . had established firmly the principle of organic architecture"—which is news to me.

It is difficult to find a page—and there are many, many pages—where the author shifts from historical fact to opinion and does not also throw in one or more of these irritating, if not entirely false, assumptions. Instead of allowing the reader to draw his own conclusions, Lancaster cannot resist encapsulating them for him in the manner of a radio or television interviewer: "Zen is indeed a dispenser of higher values" (which ought to make a Zen student cringe), or, "A garden is for recreation and diversion, whereas a house has to be utilitarian" (and that settles that). Long before the final chapter, (Miscellany and Summing Up), the reader is aware of unwillingly being caught in a tussle with semantics, a word-and-picture merry-go-round called "influences." By loosening design motivations with the assumptive technique, Lancaster is able to "prove" that Wright's Falling Water house in Pennsylvania (along with numerous other Wright designs, including the Johnson Wax Laboratory at Racine) is Japanese-"influenced." I don't know how you would go about *disproving* that Wright was so influenced, but I think you could just as easily prove that he was Mayan-influenced or Byzantine-influenced, for that matter, since there are certainly vague resemblances and common form characteristics that could be plotted—with the proper assumptions.

No doubt there are influences at work — mysteriously and otherwise — dating from the first school teacher, and before, but it is precarious for an author to assume that they explain more than the surface stuff of design. Eventually, if you carry the "influence" game far enough, you find yourself asking who really *did* wake the bugler up? Of course, it spoils the game entirely if it is possible for two different people in two different cultures just to look at nature and, in the design process, come up with forms that resemble each other with no "influence" at all. Along these lines, R.H. Blythe, the British philosopher, has written a scholarly treatise showing the coincidence of Zen in English literature long before Commodore Perry set foot on Japan. He points out that when Shakespeare says "foul is fair, and fair is foul" it is pure Zen, but nowhere does he suggest that this is because Marco Polo refused to stay home.

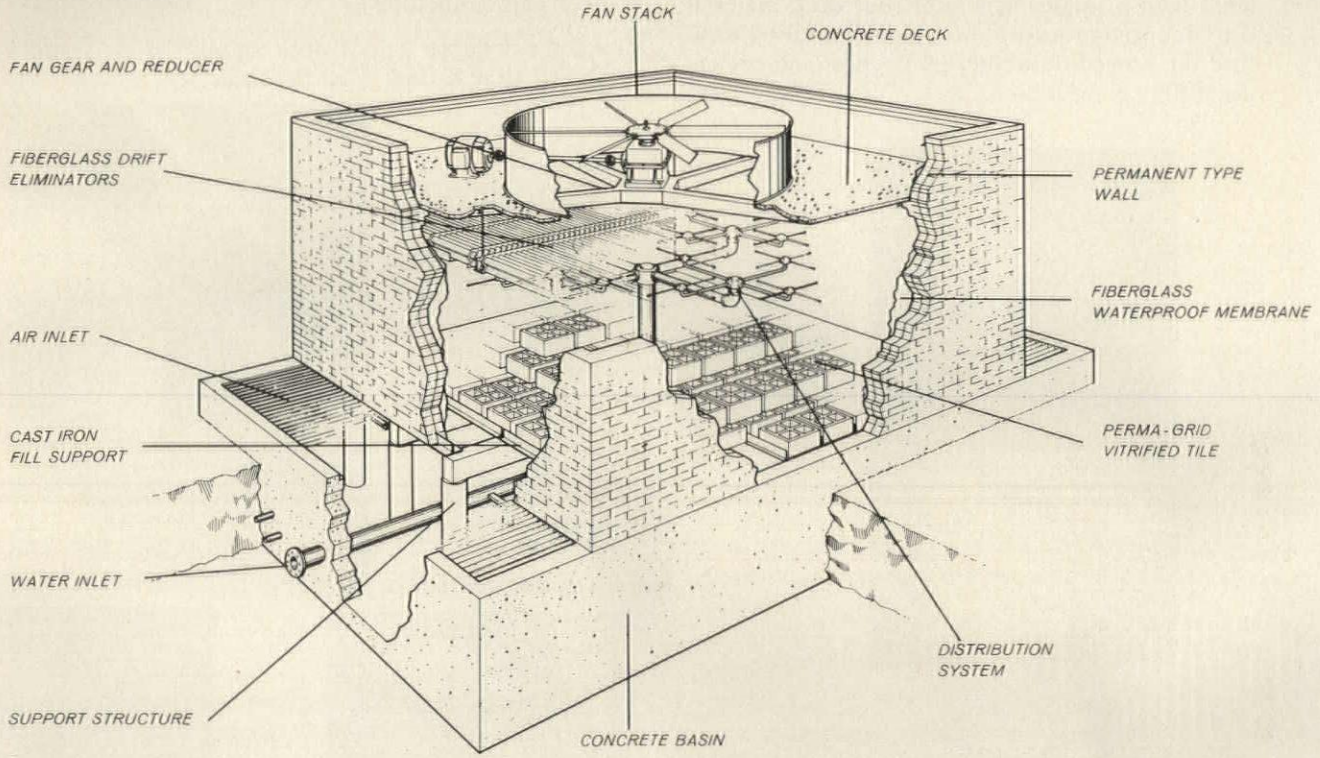
Lancaster *almost* comes to the conclusion of coincidence in the last paragraph

Continued on page 203

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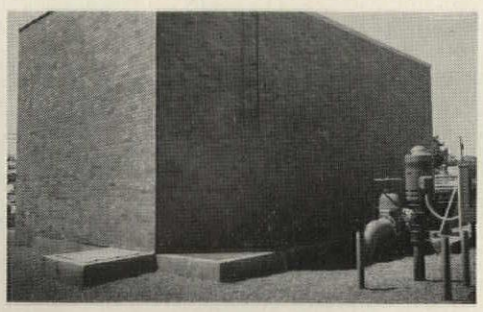
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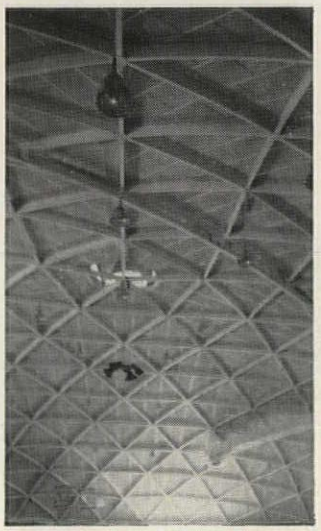
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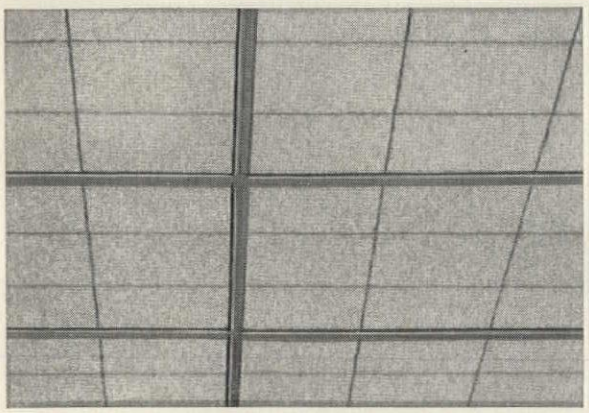
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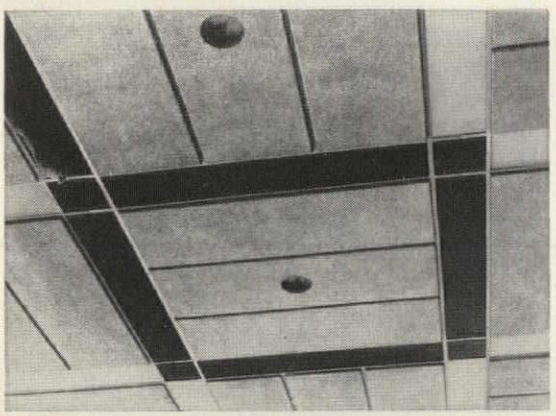
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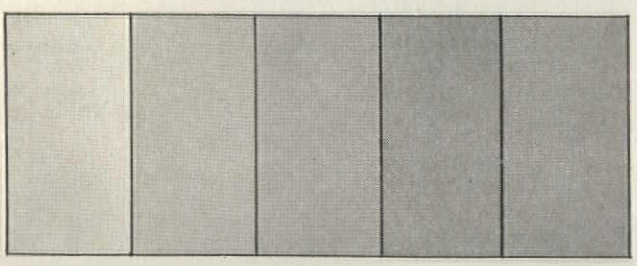
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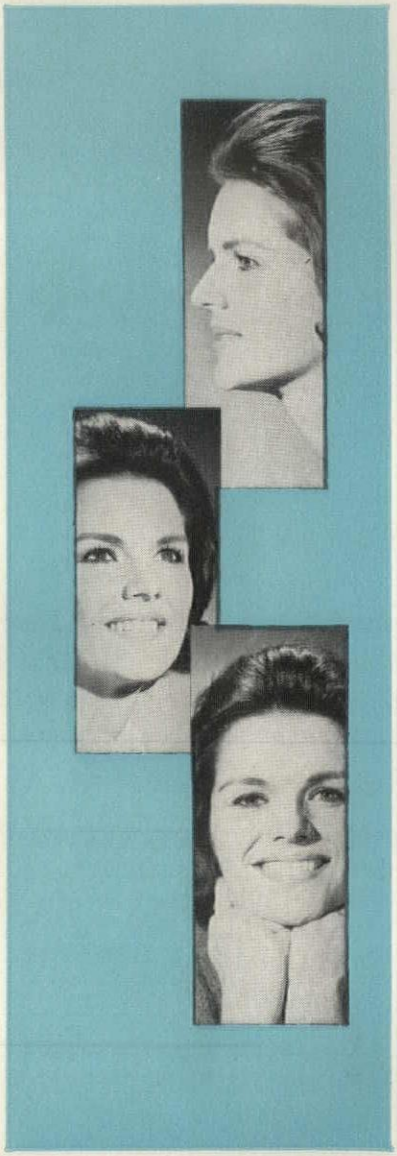
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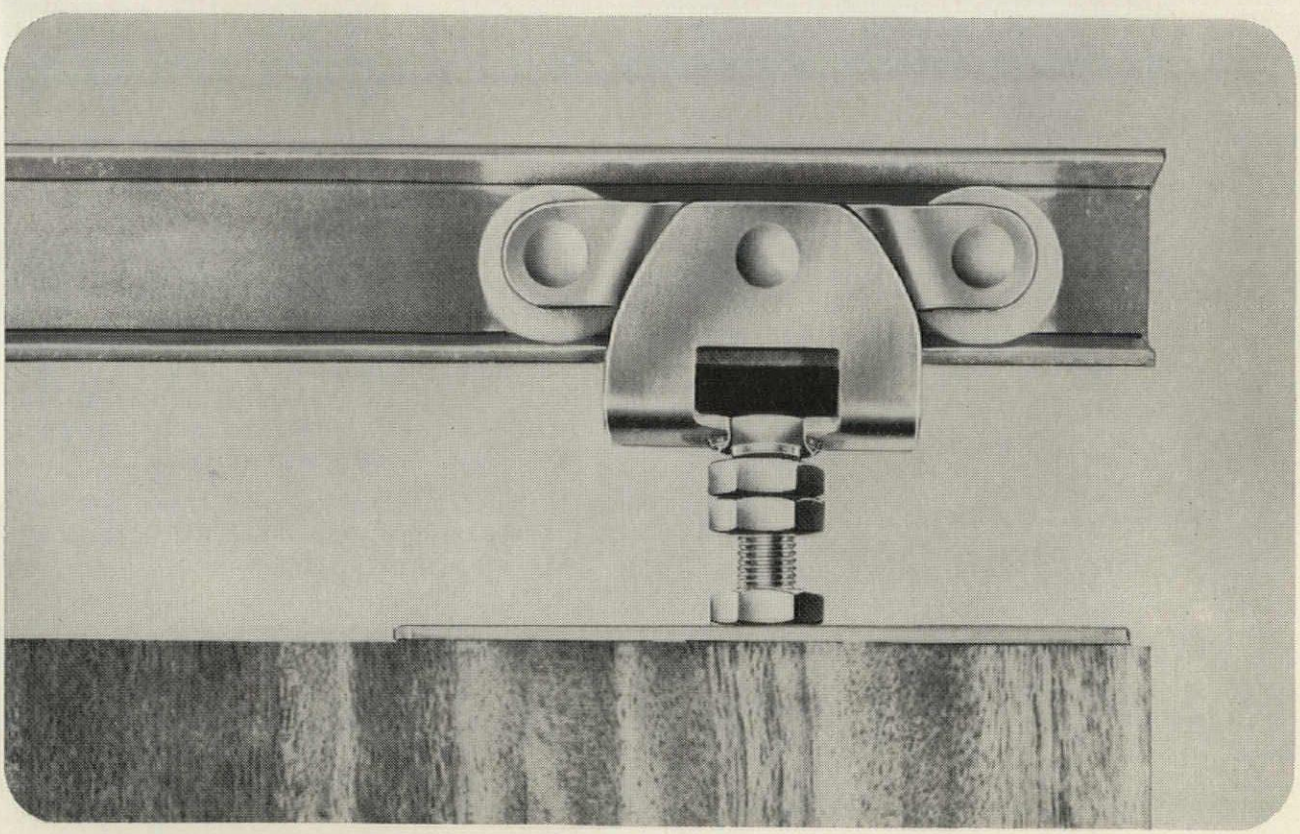
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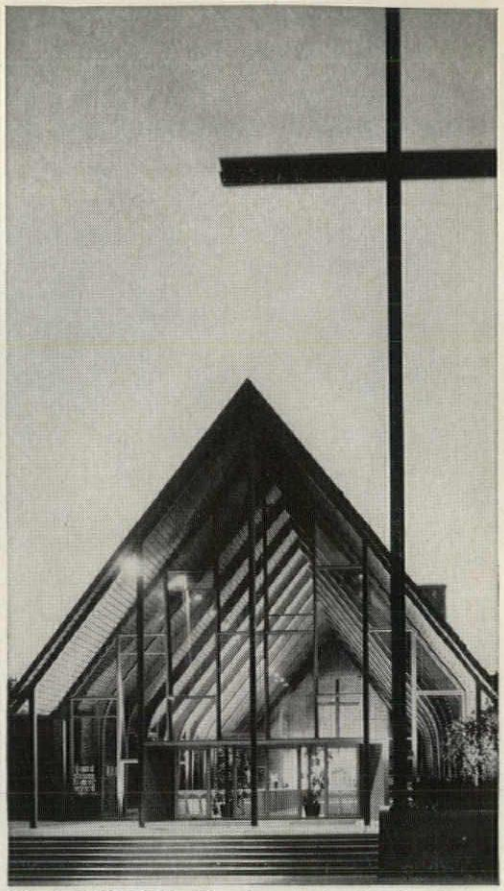
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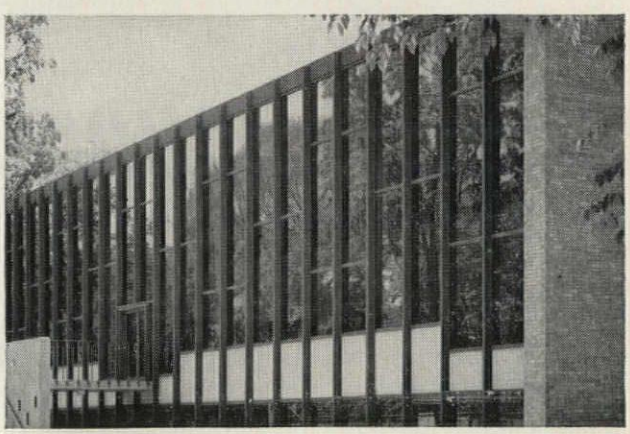
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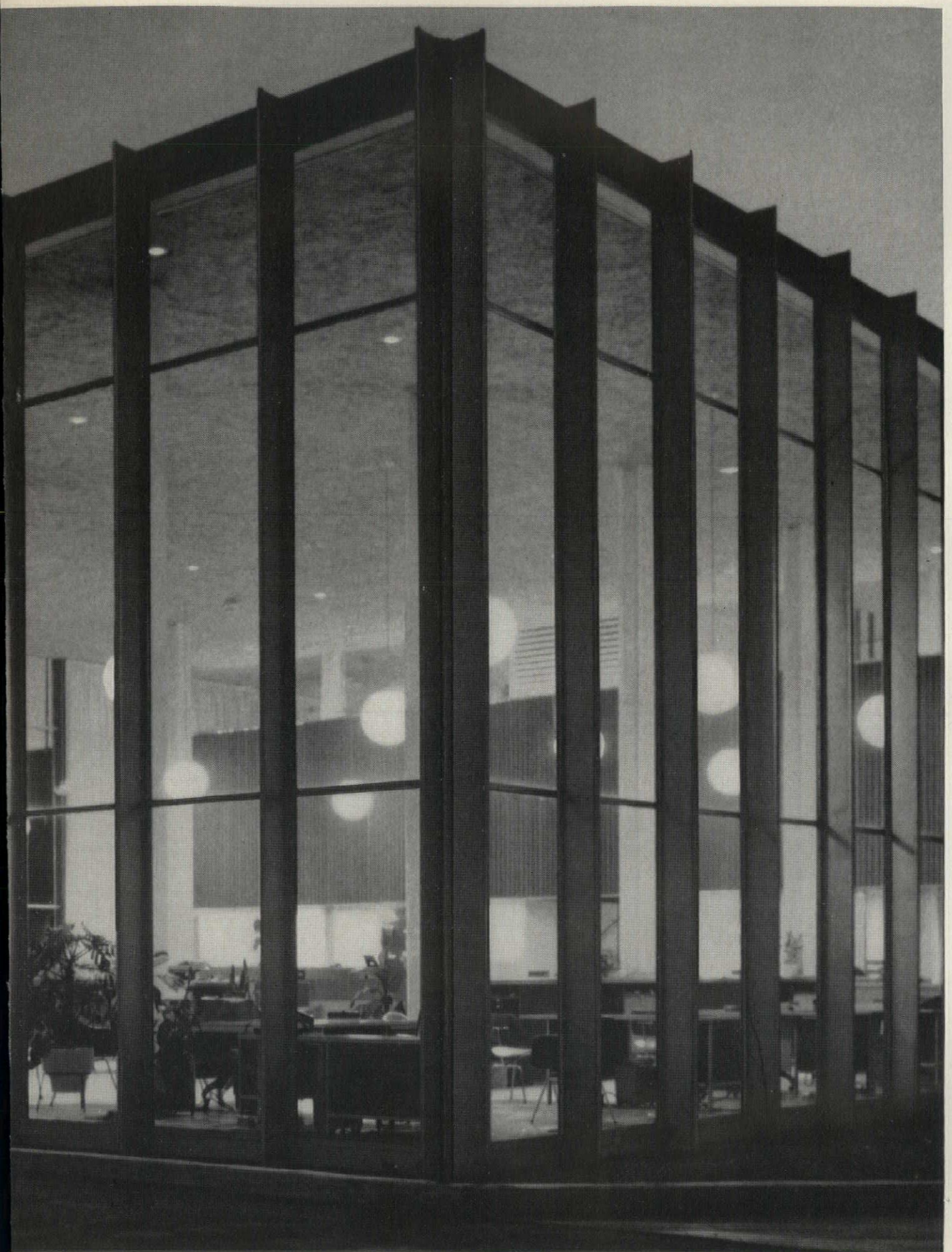
IN A CHURCH. The facade in St. Stephen's Episcopal Church, Columbus, Ohio, is glazed with L·O·F Plate Glass with *Thermopane* insulating glass in all the larger areas. Architects: Brooks and Coddington, Columbus.



IN A LIBRARY. This is *Thermopane* with *Parallel-O-Grey*® plate glass as outer panes at Beloit College, Beloit, Wisc. Architects: Loebl, Schlossman and Bennett, Chicago.



IN A BANK. The Bellevue Branch of the Seattle First National Bank is glazed with *Thermopane* insulating glass with Heat Absorbing Plate Glass as the outer pane. Architects: Mithun & Nesland, Bellevue, Wash. Ridenour & Cochran, Associates.





Imaginative use of wood provides privacy, yet never impedes friendliness in the Toluca Townhouse, North Hollywood, Calif. Wood fences have a warm way of keeping pets or people in or out. Architect: Richard D. Stoddard, A.I.A., Sherman Oaks.

For features that set your apartment apart

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Wood paneling and beams make the interior of this Santa Barbara apartment an attractive extension of its wood exterior. Architects: Howell & Arendt, A.I.A. in association with Neal Butler, A.I.A.

UNICOM MANUALS 1 & 2: "Design Principles" (122 pages) and "Fabrication of Components" (248 pages), graphically detailing the UNICOM method of house construction, are available at nominal cost to those associated with or supplying the home building industry. For free booklet describing UNICOM, write to: UNICOM, National Lumber Manufacturers Association, 1619 Massachusetts Ave., N.W., Washington, D.C. 20036.

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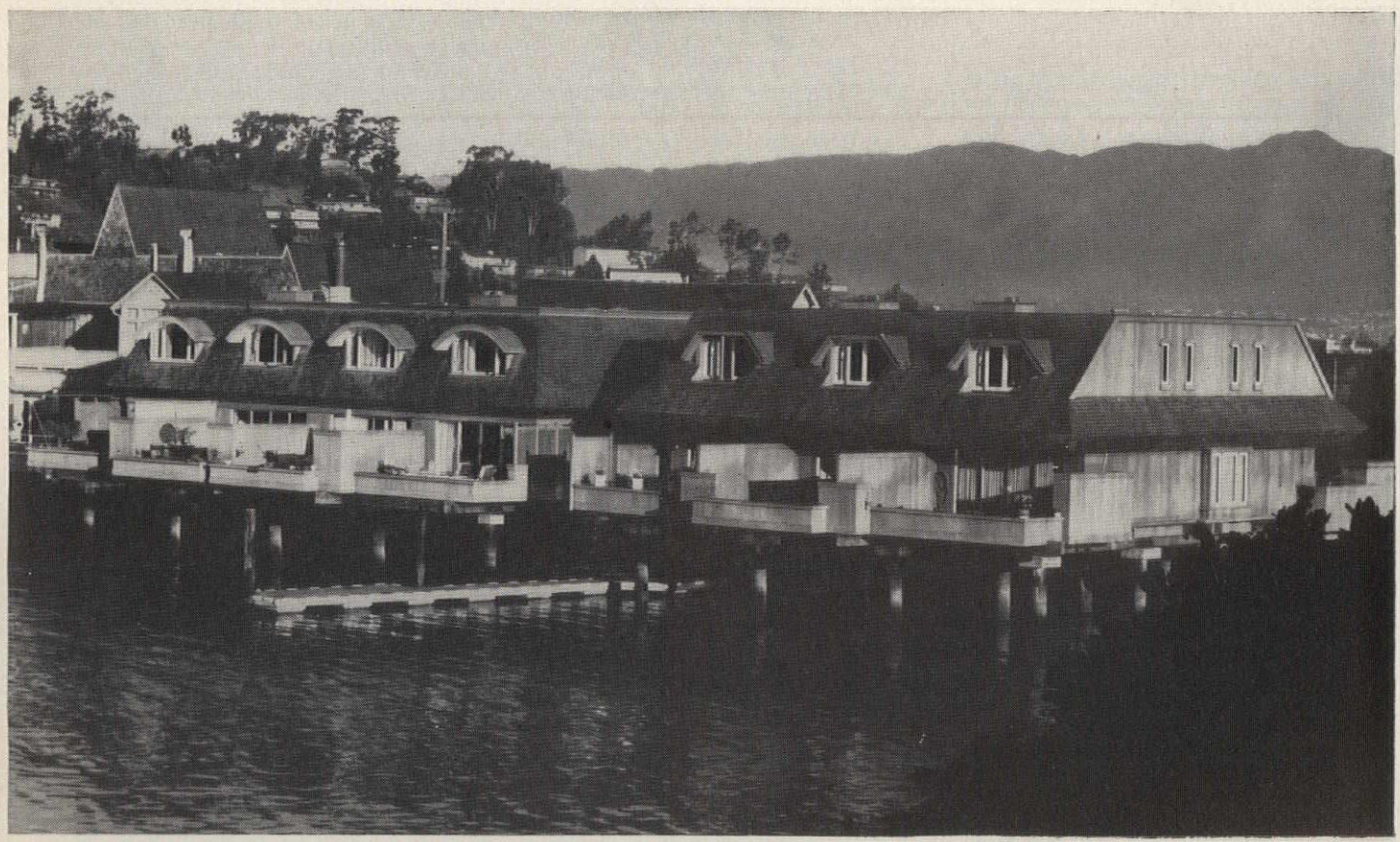
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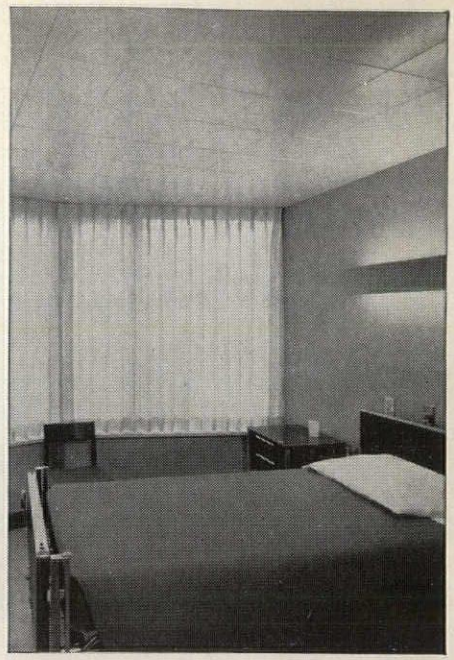
find the better way with **wood**



Wood, first wedded to water by early shipbuilders, goes modern with today's homebuilders. Pole construction of the Cove Apartments in Belvedere, California, withstands wind and weather. Owner: Belvedere Land Company. Architect: Charles Warren Callister.

For more information, turn to Reader Service card, circle No. 358

The radiant ceiling panels of the IRC System are finished in baked enamel for easy cleaning. There are no floor-mounted, wall-hung, or window-sill units to clean or to get in the way.



ENVIRONMENTAL CONTROL IN HOSPITALS

Designing to meet a medical facility's special conditions of temperature, humidity, air cleanliness and circulation

The environmental requirements of today's hospital increase the demand for total air conditioning. Thirty years ago, air conditioning a hospital was big news. In fact, air conditioning *anything* was new and exciting; the concept of a controlled indoor environment had just dawned.

Many basic ideas now common in air conditioning practice were born in that period. Force-fed by the pressure of great building programs, they matured and were refined into highly efficient systems. But they had their limitations.

The vast volume of air used to heat and cool a large building required extensive mechanical equipment and ductwork. Wet refrigerating coils had a bad habit of accumulating and propagating airborne contaminants. These deposits tended to develop into colonies of bacteria and other micro-organisms which passed into the air stream during the system's operation.

Great strides were made by filter designers to reduce this hazard. But one weakness of the filter remains: it has to be serviced regularly and faithfully by human beings — and is subject to consequences of their vagaries.

Need for a New Approach

The basic ideas of the 1930's were great in their day, but we are now in the mid-1960's. The need now is for an up-dated approach to hospital comfort control — one that takes into account the special conditions of the hospital.

Designing an air-conditioning system to satisfy these particular requirements differs from designing for other building types. Problems indigenous to hospitals are:

(1) The need for 100% exchange of air.

(2) Complete control of airborne contamination.

(3) Temperature, humidity, and air movement favorable to a patient's health and comfort.

(4) Cleanliness and ease of maintenance.

(5) Economy—both in first cost and in operation.

There is a new awareness of air conditioning as a contributing factor in sanitation, as well as comfort. Obviously, it is inconsistent to spend time and money to create aseptic conditions in surgery and other critical departments by sterilization methods and then permit contaminating influences to exist in the air conditioning system.

Growth of New Technics

Technological advances over the past decade have placed at the disposal of the hospital architect new equipment, methods and procedures that are capable of improving environmental conditions in medical facilities — at the same time, contributing to economy of installation and operation.

One of the newest developments is the Inland Radiant Comfort System. Here is a completely new concept in total air conditioning specifically designed for the needs of the hospital.

This system combines three widely accepted, proven components into one engineered design: (1) a radiant-acoustic ceiling, (2) a chemical air conditioner, and (3) a cellular steel floor. Because of the integrated design, each component assists in the functioning of the others.

100% Exchange of Air

The arguments for and against using only *outside* air as an air-conditioning source, instead of recirculating *inside* air, are academic. If it weren't for its record of excessive costs (*until now*), everyone would prefer to start with outside air, condition it, feed it into the patient's room, then exhaust it. Outdoor air, by action of the sun and massive dilution, usually is less contaminated than recirculated air, both given the same degree of filtration.

Recirculating inside hospital air is a touchy procedure completely dependent upon filter efficiencies which can be variable, due to maintenance problems. Equally or more hazardous is to attempt flushing air completely in some parts of the hospital and not in others, depending upon balanced pressures to prevent cross-contamination.

No one prefers these compromise measures. They were forced upon hospital designers by the high cost of conditioning the large volumes of air required by conventional, all-air systems. To add the cost of conditioning outside air was to prohibit it.

This is no longer so, with the Inland Radiant Comfort System for hospitals. By efficiently handling only a small amount of air, the IRC System introduces 100 per cent outside air throughout the hospital and does it at no extra cost.

This contrasts with conventional air conditioning systems which generally are based on the principle of using large quantities of air, most of it recirculated. Decontaminating air in large quantities not only is impractical, but the fan horsepower to move such air adds to the expense of operation.

With Inland's modern system, it is practical to exhaust all air without recirculation. The air can be decontaminated very effectively, because of the small amount used.

Radiant Panel Ceiling System

The inherent advantages of radiant-acoustic ceiling panels help to make this new Inland technology a sound approach to hospital air conditioning.

As its name implies, the radiant-acoustic ceiling heats and cools by the principle of radiant heat transfer and, at the same time, provides acoustical control to the room space.

Acoustical treatment is simple. Perforations in the aluminum panels, with glass-fiber insulation above, give this ceiling system an excellent acoustical rating — noise reduction coefficients as high as .90. Sounds disturbing to a restful atmosphere, e.g., the extra noise level during visiting hours, are dampened.

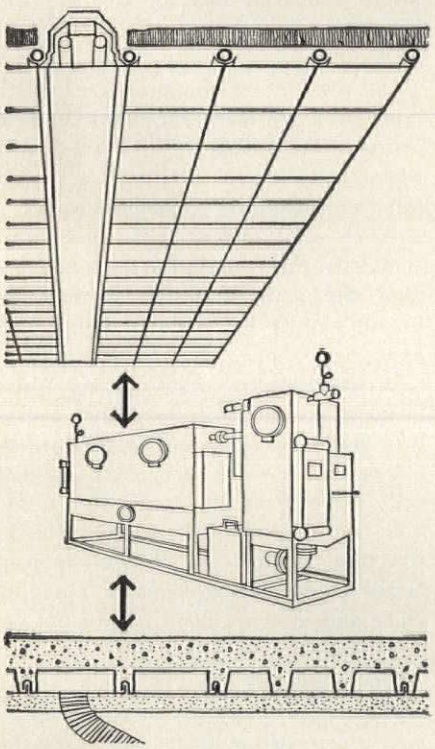
The radiant-acoustic ceiling acts as a single, wall-to-wall heat exchanger — heating when the thermostat calls for heat, and cooling when circumstances require. The ceiling heats in the same manner as the sun. Low-frequency waves of heat energy travel in straight lines from the ceiling to every part of the room, bathing all surfaces in warmth.

This steady, gentle comfort is patient-oriented. Physiologists have determined that more than one-half of our body heat is lost by radiation. Therefore, the most practical method of maintaining comfort is to control the rate of heat gain or loss by radiant means.

Here's where radiant heating is ideally suited to the needs of a hospital patient. It bathes his body in continual warmth, free of drafts. Even without a blanket, the rate of his body heat loss is kept at a uniform rate throughout the day and night. Because radiant heating is not dependent upon moving air to raise room temperature, there are no hot blasts from registers, no strong convection currents.

Radiant cooling obeys the same physical law of radiant energy transfer as radiant heating, but in reverse. Now, the ceiling is made cool and it absorbs heat from all surfaces in a room, including a patient's body. The human body loses heat most comfortably through radiation, without chilling drafts.

Only ventilation is required of the air system. Ventilating air is supplied at low velocity and held to desirable humidity levels.



The Inland Radiant Comfort System is made up of three basic components, carefully engineered to work together more efficiently than any one of them could work alone. The components are not new to architects and mechanical engineers. They are: (1) a radiant-acoustic ceiling, (2) a chemical air conditioner, (3) a cellular steel floor (optional in hospital construction).
All three of these components have long records of successful performance as individual products. It is the way in which they are used together — in integrated design — that accounts for the efficiency of the IRC System: The radiant ceiling handles virtually the entire heating and cooling loads in the hospital. The chemical air conditioner controls humidity and purifies the air. Reduced air volume makes it possible to use the cellular steel flooring for air distribution, eliminating tons of ductwork.

Chemical Air Conditioning

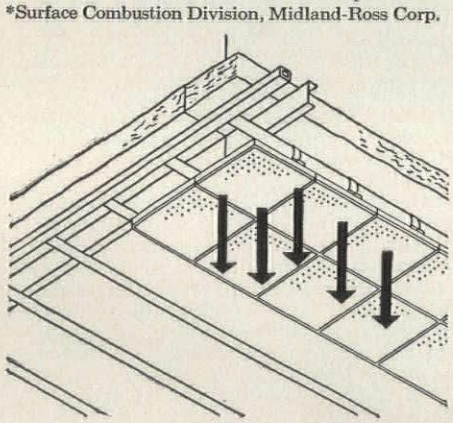
Chemical air conditioners have long been recognized as superior devices for controlling humidity and air purity in operating rooms, recovery rooms, and other critical hospital areas. In the integrated design of the Inland Radiant Comfort System, a Kathabar® Chemical Air Conditioner* treats the hospital's entire ventilation-air system.

Air is conditioned by a spray of lithium chloride. This traps up to 97 per cent of all airborne impurities.

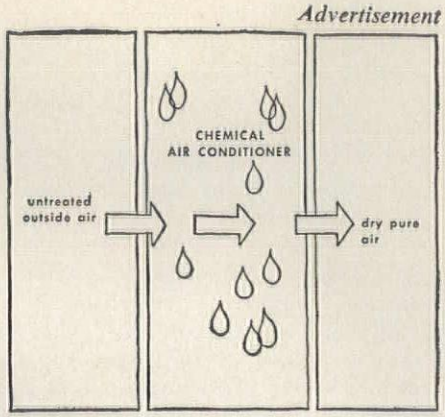
Conventional air conditioners use refrigeration coils to cool and dehumidify the air. For many years, these wet coils have been recognized as breeding places for colonies of bacteria and micro-organisms.

Trouble arises when matter from these colonies blows off into the hospital's air stream. Elaborate filter systems have been designed to remove this contamination from the air, but their complete effectiveness frequently has been questioned. Hospital administrators, bacteriologists, and others have been shocked at the contaminating effect of conventional air conditioning systems.

*Surface Combustion Division, Midland-Ross Corp.



The radiant-acoustic ceiling acts as a single, wall-to-wall heat exchanger. Heating and cooling are accomplished by means of aluminum panels attached to grids of water pipes hung in the manner of a conventional suspended ceiling. Hot or cold water is circulated through these pipes to heat or cool the panels. Heat loss and noise are reduced by an acousti-thermal blanket.



Chemical air conditioning removes the latent (humidity) load from incoming outside air. A non-vaporizing solution of lithium chloride with a great affinity for moisture is sprayed into the air stream. Condition of the air as it leaves the dehumidifier at a specified humidity level depends upon (1) solution concentration and temperature, and (2) temperature of cooling tower water.

Substantial Construction Savings Possible

Where hospital plans include a steel frame, significant savings in construction costs accrue from the IRC System's third basic component, a cellular steel floor.

Ventilating air is carried through cells in Inland Celluflor, eliminating tons of expensive ductwork. This not only saves money on materials and labor, it reduces the space required between floors. This can drop the total height of a multi-story building by as much as 5 per cent, without sacrificing a cubic inch of interior space. Obviously, there are consequent cost savings all down the line — including savings on the foundation, since building weight shrinks with the height.

There are other advantages to consider here, during the planning stage of a new hospital: The greater erection speed of steel-frame construction. The flexibility of electrification made possible only by a Celluflor steel floor.

Breakthrough in Hospital Comfort Control

Of great importance to the hospital architect, the Inland Radiant Comfort System delivers all of its advantages well within the budget for an ordinary hospital air conditioning system. Key to its economy is its concept of three basic components working together. By balancing the high performance of these components through careful engineering, the IRC System saves on both first cost and operating costs.

Further information is available in a new brochure, "Breakthrough in Hospital Comfort Control." Write for your copy today. Address Inland Steel Products Company, Engineered Products Division, 4069 West Burnham Street, Milwaukee, Wisconsin 53201.

Continued from page 188

another semester, involving two semester credits.

The courses are given by practicing professionals rather than full-time teachers. This helps to bring into the school an awareness of the latest developments in a volatile field.

The course in mechanical plant involves lectures, the use of a text and several engineering reference books, field trips to examine newer plants of current interest, home assignments such as field survey and investigation of existing plants, calculations and design for simple structures, in addition to classroom quizzes and a final examination. The subjects covered include: water supply in nature; how it is developed and utilized; plumbing and sanitation, sewage disposal; water systems, hot water generation; fire protection systems; heating load calculations; heating methods and systems; economics; equipment for heating systems; ventilation systems; cooling load calculations, orientation, fenestration; zoning, psychrometric principles; air-conditioning methods and systems; refrigeration principles and systems; equipment types, relative size and weight; horizontal and vertical distribution; and over-all mechanical analysis.

The emphasis is always architectural. Rather than dwell on the details of layout and the minutiae of equipment, much time is spent examining the effects of the various systems on the building. What effect will orientation and fenestration have on the mechanical plant? What are the fundamentals of zoning for heating and cooling control, and how can the architect minimize zoning problems? How can air conditioning tonnage be conserved? What type of refrigeration and air handling is best for an auditorium, and where must equipment be located to avoid acoustical problems? What are the economics of high- and low-velocity air distribution? What effect will mechanical plant location have on structure? What considerations enter into the choice of fuel for heating; what are its economics and effects of choice on building?

Quizzes and examinations are of the type given by state registrars, and the course notes and texts are very helpful when the young architect is faced with his own registration examinations.

When the student has successfully completed this course, the next and most vital step is to keep the subject alive by applying it to his major design problems.

In the semester following the course in mechanical plant, he must develop two major architectural programs, devoting six weeks to each. Each program calls for a complete architectural solution, and includes the requirement for structural design and the development of the mechanical systems in broad essence and in some detail, including calculations for load and major equipment.

The class is divided into several studios, with eight to twelve students per group. All students are given the same generic problem, but each studio critic composes a variant program.

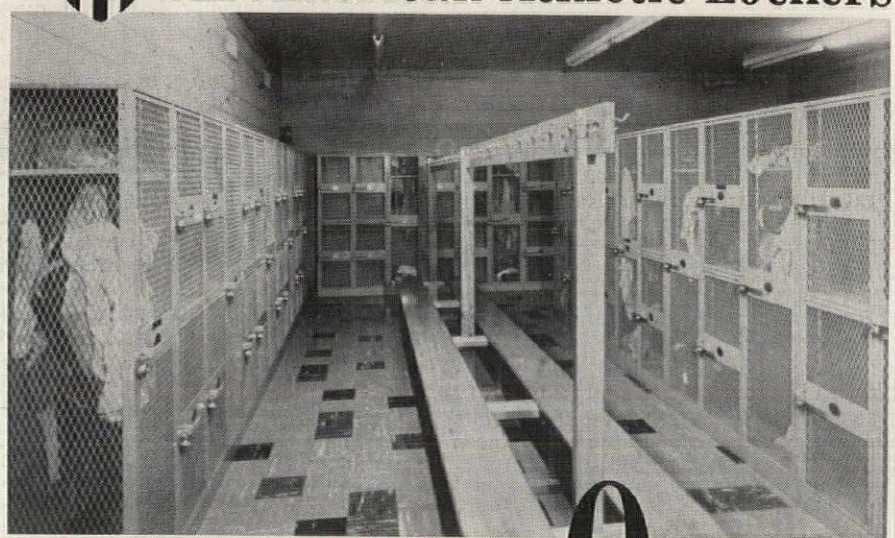
During the development of design, in addition to frequent criticism by his teachers and critics, several lecture seminars are held with visiting critics and lecturers to discuss the problems peculiar to the program. These include discussions of structure, of acoustics, lighting, the mechanical plant, et al.

The program is analyzed for variety of approach and for the application of newer methods, materials, and techniques. Examples from the work of the visitor is sometimes examined, and a

Continued on page 230

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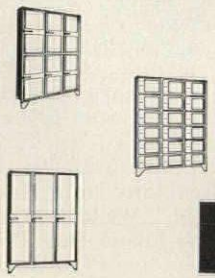
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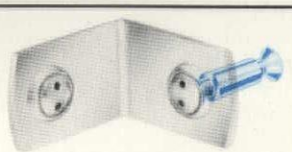
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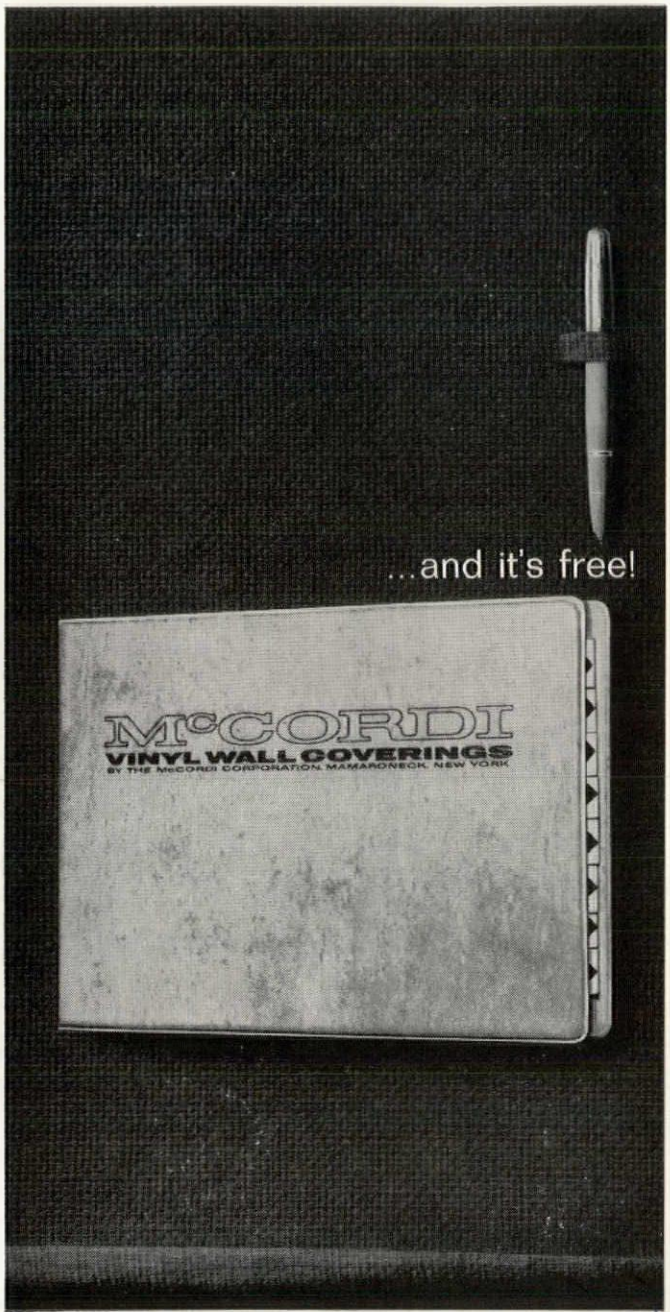
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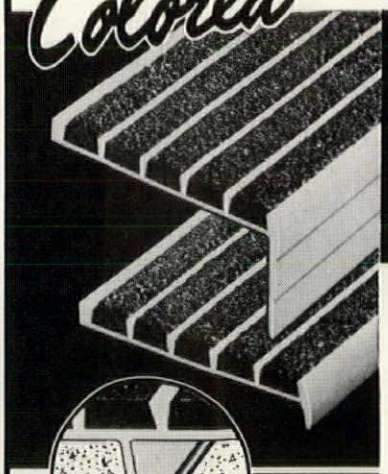
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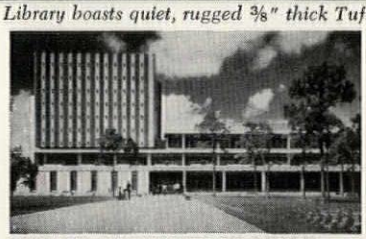
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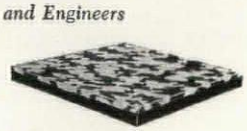


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consisting of site plans, building plans, elevations, sections, structural and mechanical data, and often a model of the building. He explains his basic premises, the philosophy of the design, the structural system, the mechanical plant. The jury members ask probing questions, point out fallacies, weaknesses, conflicts with the program. An occasional disagreement in the jury may enliven the proceedings. The audience of students and their friends obtain an insight into those elements considered most important by the professional.

After the student's presentation and the ensuing discussion, the student and audience leave, to permit grading by the judges.

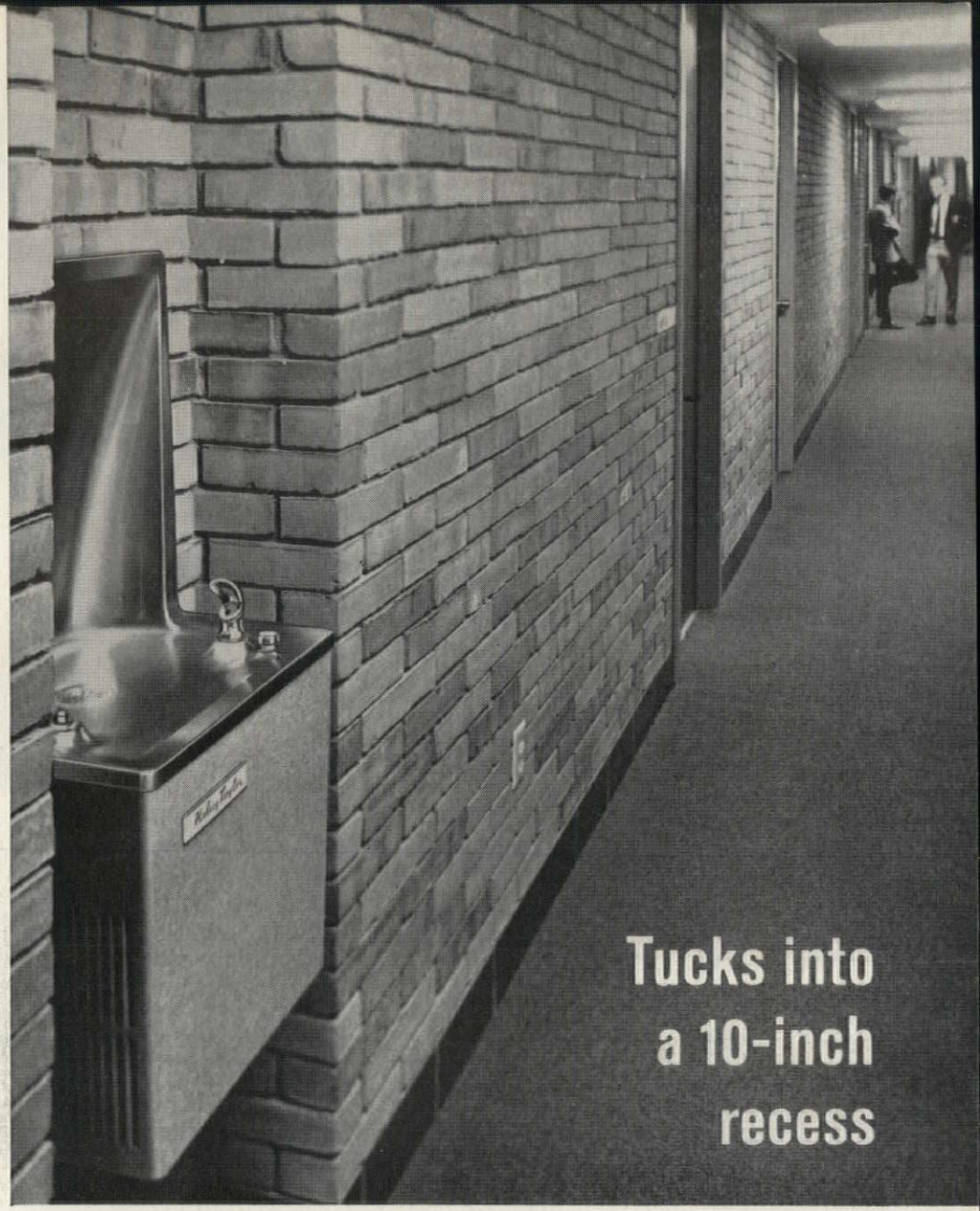
As for the mechanical plant, the student will be judged not by his ability to design a mechanical system, but by his ability to create a building in which the mechanical plant is a natural outgrowth, an integral part. The details of this system are of no great consequence to the architect, the basic planning all-important. He is expected to: (1) consider orientation and fenestration, as they affect the plant; (2) study the type of system most applicable, economical, and conducive to flexibility and architectural freedom; (3) study the zoning, or segregation, of areas with similar requirements, for proper control, how the architectural design will be affected, how it will affect the plant; (4) estimate approximately the heating and cooling loads, to permit assessment of size of plant and space required for equipment; (5) make physical provision for major equipment spaces, duct, and pipeways; consider problems of air intake and exhaust.

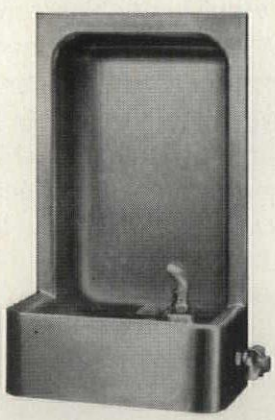
Each judge, be he architect or engineer, considers the project as a whole, as an integration of all architectural, structural, and mechanical elements, rather than considering the merits or demerits of his particular specialty. The tangibles and intangibles that make for either a successful or a mediocre building are examined and weighed. The jury is polled and an over-all grade determined, then announced to the waiting student.

The program has brought important benefits. Not only do the technical courses solidify and take root, but the budding architect is made constantly aware of their importance and pervasive influence. He cannot escape the need for bringing into focus early in his design the structural concept and the major mechanical plant elements.

In the student's thesis or final year he

Continued on page 234





SEMI-RECESSED FOUNTAIN
A matching space saver in stainless steel—extends only 7½ inches from finish wall. Can also be furnished with Halsey Taylor remote package-type water cooling unit. Full recess, face mounted and free-standing fountains in stainless steel or vitreous china. Write for details.

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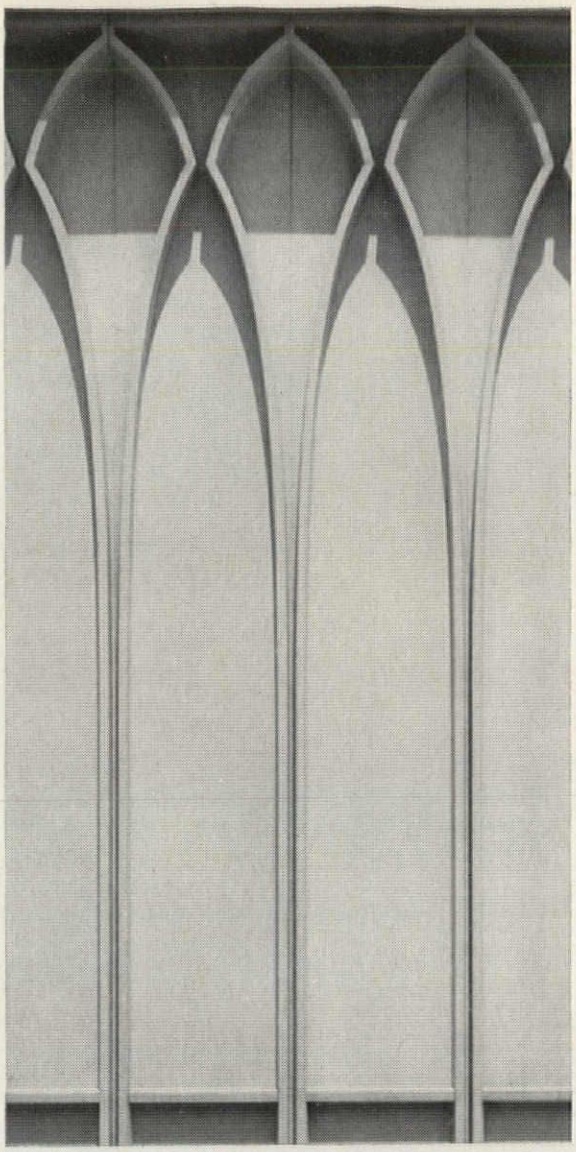
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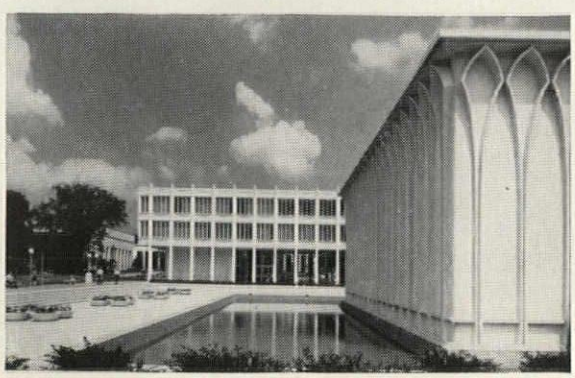
For more information, turn to Reader Service card, circle No. 370

Helen De Roy Hall and University Hall, Wayne State U., Detroit, Mich. **Architect:** Minoru Yamasaki & Associates. **Engineers:** Worthington, Skilling, Helle & Jackson. **Gen'l. Contractor:** Darin & Armstrong, Inc. **Precast Concrete Mfr.:** Aggregate Surfaces, Inc., Dearborn.



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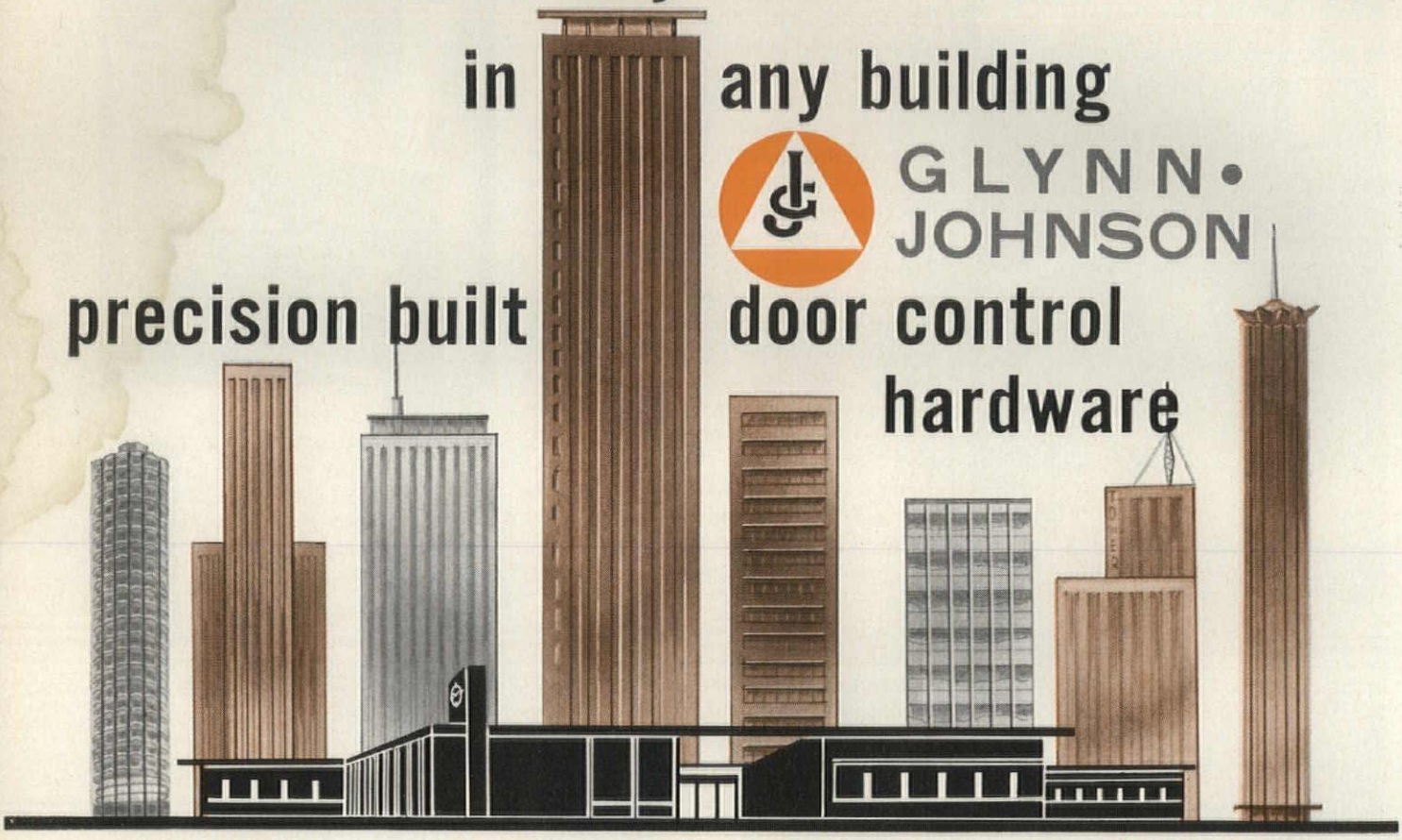
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WHITE CEMENTS

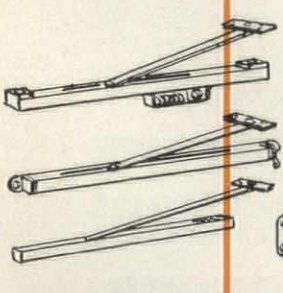
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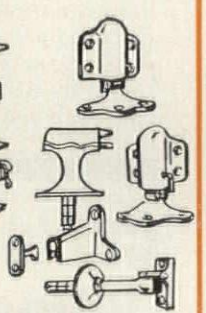
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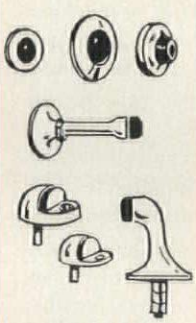
Overhead door holders and shock absorbing stops for interior and exterior doors opening up to 110°.

Overhead—means out of the way.



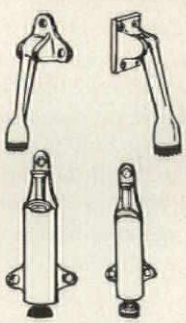
Floor and wall type door stops and holders for interior and exterior doors opening to any degree

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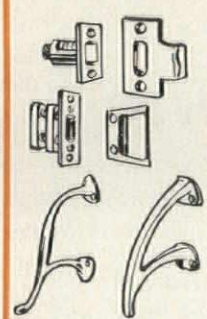
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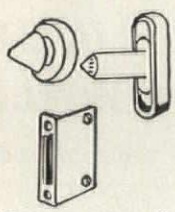
Hold door at any degree of opening. Styles to suit varying budgets and door sizes.



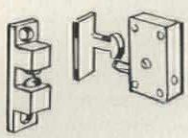
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Continued from page 231

must develop, in the same manner but with even greater detail and wealth of technical data, a major building program. The successful conclusion of this project, with its final judging as described above, will result in the award of his degree as Bachelor of Architecture. The hope is that the young architect will have acquired a habit of work, a *modus operandi* that will result in a real wedding of all of the techniques of building.

To be completely factual about the program described at the University of Pennsylvania, it must be admitted that the procedures and objectives outlined are the ideal and are not always attained. Too many students, in the press of time, give lip service only to the tenets of coordinated planning and design. Too often, the letter of the program is followed, not the spirit. Too often, the mechanical plant is superimposed upon the finished architectural design, and glibly rationalized.

But a good, solid start has been made, and each year should see an improved facility to teach the design of a building as a whole, and not a collection of disparate elements.

It is interesting to note that the amount of time and effort devoted to the mechanical and electrical plant under this program is greater than that included in the curriculum in mechanical engineering at many universities. Often, these courses are casually conceived and almost lost in a welter of machine design, power plant design, water and sewage plant design, and the like. All of these courses are fine if one is to specialize in machine and tool design or civil engineering, but they help very little in training the young engineer for the very great field in the design of building services.

The dearth of trained engineers in this field make it especially imperative that the architect become more knowledgable in this direction, so that his good taste and trained logic can help solve the many problems involved in creating the ideal environment within his building.

NOTICES

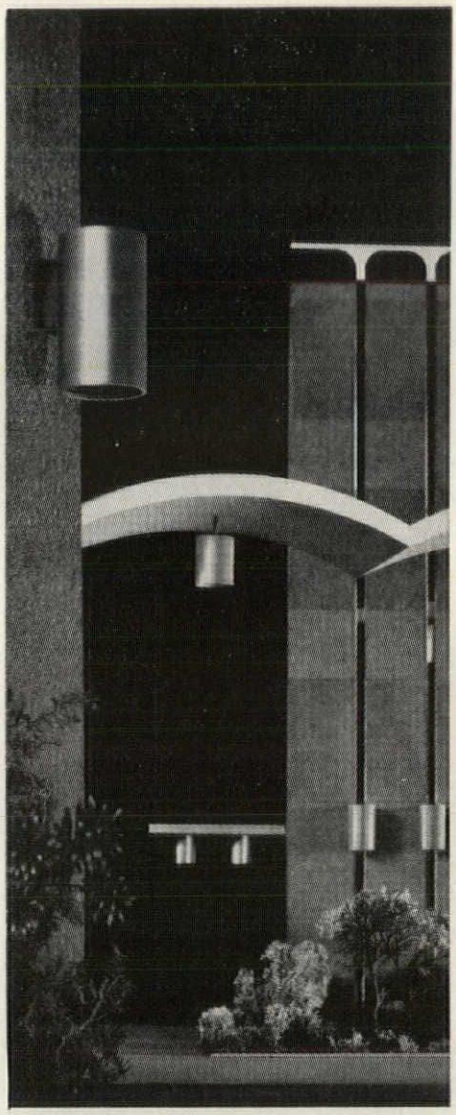
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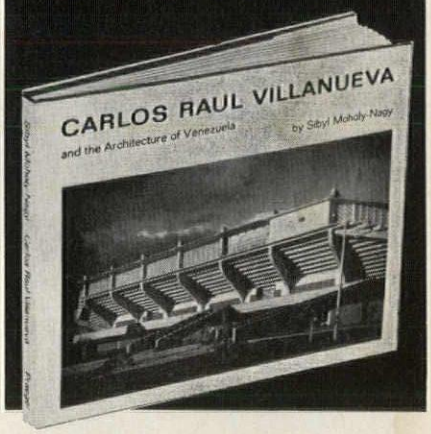
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BRUCE GOFF, Architect, Rm. 720, 20 W. 9 St., Kansas City, Mo.

TREGEAGLE & ASSOC., Consulting Engineers, Suite 308 Executive Bldg., 455 E. Fourth South St., Salt Lake City, Utah.

KURT VERSEN, Designer, 10 Charles St., Westwood, N.J.

New Firms

H. G. BARNES, Architect & Associate, 210 Elks Bldg., Jackson, Tenn.

HUNTER ENGINEERING CO., 1495 Columbia Ave., Riverside, Calif.

JOHN K. KARFO, Architect, 939 Madison Ave., New York, N.Y.

SCOTT • THOMPSON, Architects, 5965 Cabanne Place, St. Louis, Mo.

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EDMUNDSON, KOCHENDOERFER & KENNEDY, Architects, Engineers of Portland, Ore., announce that RONALD L. TRAVERS is a principal in the firm.

NOLEN • SWINBURNE & ASSOCIATES, Architects, Planners, Philadelphia, Pa., have made VICTOR H. KUSCH a partner in the firm.

STEPHENS, WALSCH, EMMONS & SHANKS, INC., Architects, Engineers, Phoenix, Ariz., have taken KENNETH I. OBERG and BAYARD R. QUICK into full partnership.

Elections, Appointments

AMERICAN INSTITUTE OF STEEL CONSTRUCTION, New York, N.Y., has re-elected ROBERT C. PALMER president and a director.

ANEMOSTAT PRODUCTS DIV., DYNAMICS CORP. OF AMERICA has appointed WILLIAM F. PETERS as general sales manager in charge of sales and marketing.

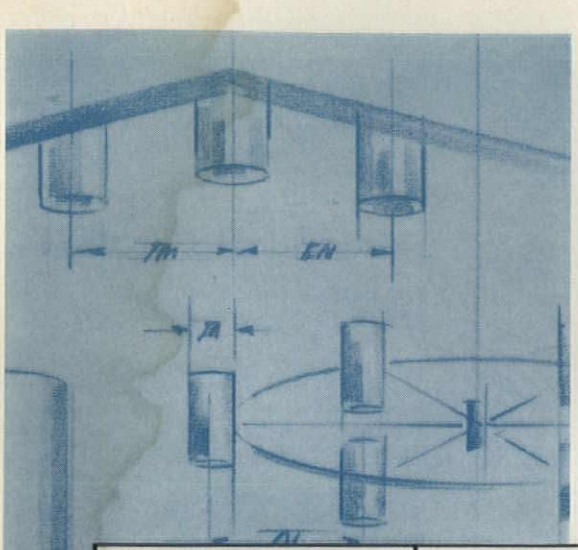
FRIEDIN STUDLEY ASSOCIATES, Business Planning and Design Consultants, New York, N.Y., have appointed SANFORD KAUFMAN director of internal operations.

HARLEY, ELLINGTON, COWIN & STIRTON, INC., Architects-Engineers, Detroit, Mich., has named FREDERICK BAESSLER as project administrator.

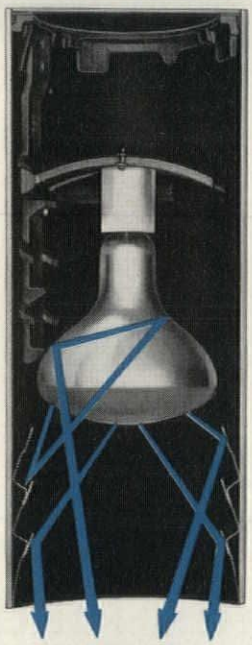
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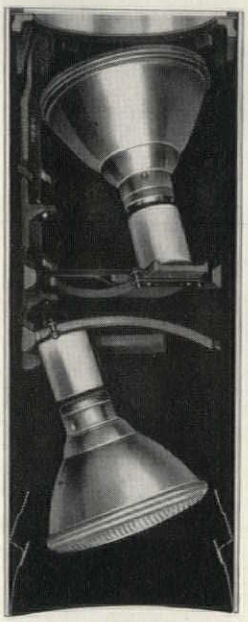


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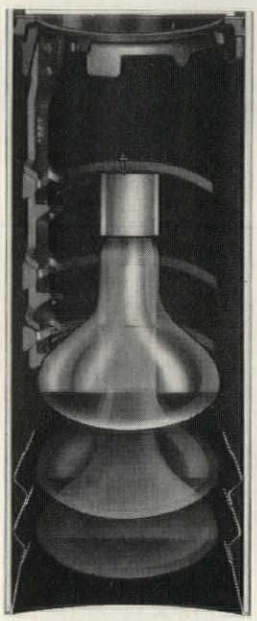
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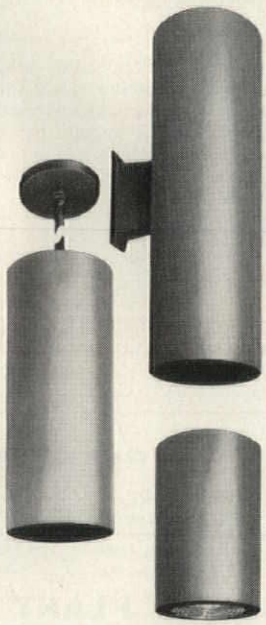
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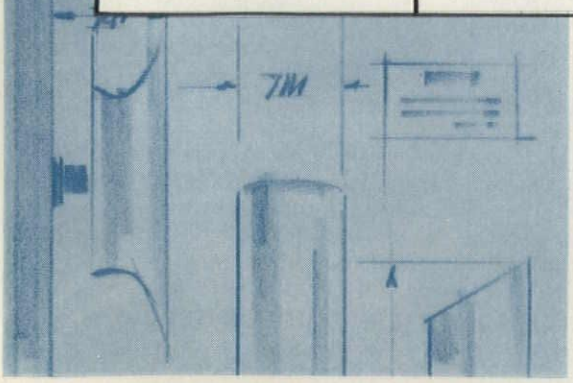


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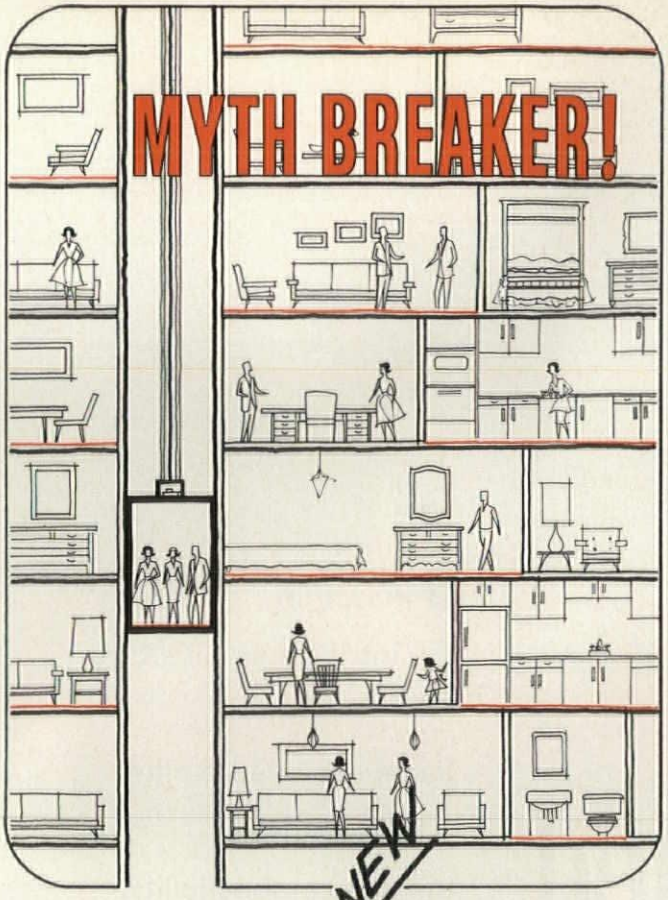
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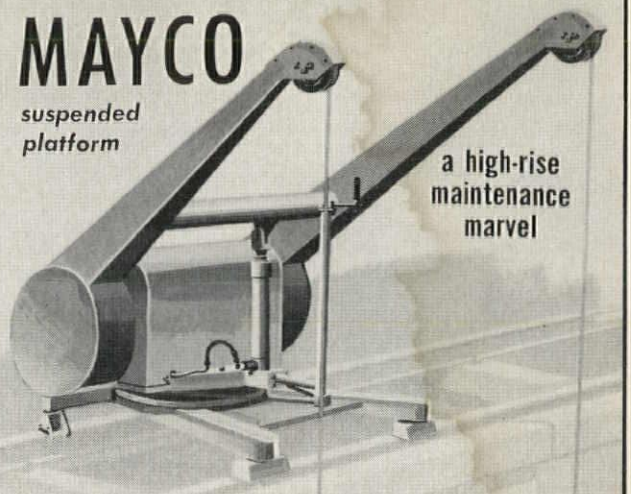
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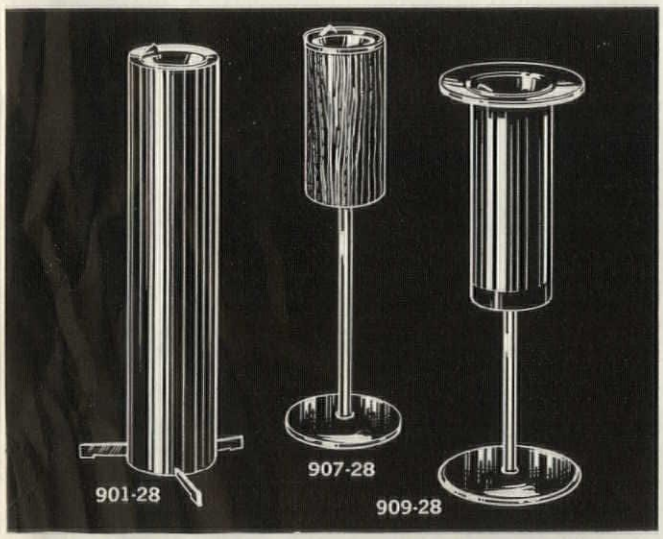
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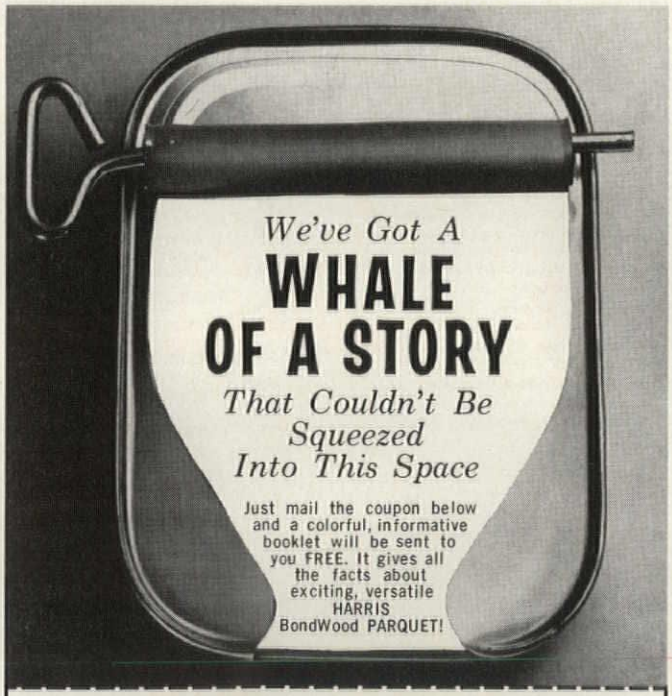
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